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Annual Report

Board of Economic Advisors

Albert J. Kelley, Chairman


Commonwealth of Massachusetts

Francis W. Sargent, Governor

"An Economy at the Crossroads"

1972

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THE BOARD OF ECONOMIC ADVISORS COMMONWEALTH OF MASSACHUSETTS

The Board of Economic Advisors was created by Legislative Act (General Laws, Chapter 7, Section 37) on July 2, 1964. Its functions are:

- to make a continuing study of the economy of the Commonwealth
- to study and report on problems which the Governor may present to the Board
- to serve as a consulting body to State Government for economic affairs
- to render an annual report on the state of the economy to the Governor and the General Court

Albert J. Kelley, Chairman
Dean, School of Management
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SUMMARY

The economy of Massachusetts is at a crossroads at this point in time. The recent recession, coupled with defense and aerospace cutbacks, hit the Massachusetts industrial sector severely. As the nation is moving ahead on an upward economic surge, Massachusetts is lagging behind and, indeed, finding it difficult to gather momentum.

Massachusetts will participate and share in the economic growth of the United States as it has in the past. As the national economic tide comes in, all ships of state will rise. Whether Massachusetts leads or lags, whether it falls above or below the national average, is a matter over which it has significant control. The Commonwealth can exercise this control through its policies and legislation.

The Board of Economic Advisors believes that many "doom and gloom" theorists have overstated their case about the Massachusetts economy during recent months. There are many strong features in the Massachusetts economy on which to build as well as weak ones to criticize. But action is required now to reverse unfavorable trends and to gain positive momentum.

This report:

- (a) Presents and analyzes statistical data and trends
- (b) Projects economic and financial trends through 1980
- (c) Identifies the key economic elements in Massachusetts and shows how they interrelate to each other.

The key elements in the Massachusetts economy are:

- (a) State and Local Expenditures (Tax Requirements)
- (b) Business and Industrial Base (Jobs)
- (c) Tax Distribution (Master Tax Plan)

These elements are important not only in themselves but perhaps even more in their relation to each other, as discussed in the Report.

The Commonwealth of Massachusetts has been on a degenerative cycle with increasing public expenditures, increased unemployment and an antiquated tax scheme. However, this cycle can be reversed and the economic spiral caused to go upward with appropriate policies which reinforce the economy and each other.

The year 1972 saw the beginnings of healthy action and attitudes. A statewide Economic Task Group made recommendations to the Governor who incorporated many of these in an Economic Message. The resulting legislative proposals for industrial development were passed, by and large, by the Legislature.

The year 1973 is crucial for the economic future of Massachusetts. A few key decisions and policies can give a positive thrust to the economy and move it off dead center where it is currently languishing. The recommendations of the Board with respect to these decisions follow.

RECOMMENDATIONS

The Board of Economic Advisors recommends that:

(1) State and local public expenditures be severely curtailed. In a period of rising costs and inflation, some increases can be expected and a zero growth budget is unrealistic. How much expenditure growth The Commonwealth can afford as a function of its business and industrial base (gross state product) should be determined and used as a limiting criterion.

(2) The reorganization of the State Government continues through Phase II (realignment of departments and divisions) with all possible speed. While the early costs of reorganization have been and will continue to be high, the long-run economic benefits are large. By eliminating overlapping and duplicating functions, by installing modern management and control systems, the Executive should be able to control and reduce State expenditures to a level below the alarming trends herein projected which assume a status quo organization.

(3) The Commonwealth adopt a Master Tax Plan in 1973 as one of its highest priority items of public policy. In addition to the direct benefits resulting from a firm distribution formula, uncertainty will be removed from the current floating distribution method.

(4) Massachusetts' efforts in economic and industrial development be increased. The Department of Commerce and Development (or its equivalent) should be adequately funded to perform industrial development surveys, to provide advice to organizations contemplating operations in Massachusetts and to provide business assistance to companies already located in Massachusetts. This cost should be considered an investment in the economic future and industrial revenue base of The Commonwealth.

(5) Massachusetts develop a Master Economic and Financial Plan for 5 years into the future. Such a plan, which does not now exist, would pull inter-related economic and financial factors together in one place and form. The Board of Economic Advisors recommends that such a plan be given highest priority and initiated immediately to help develop pathways out of our current economic dilemma.

OVERVIEW

The economy of The Commonwealth of Massachusetts is, in many respects, at a crossroad at this point in its history. During the recent national economic recession, Massachusetts bore more than its share of the brunt, in particular because of its heavy dependence on government aerospace and defense expenditures.

It is a well-known fact that since 1967 over 100,000 jobs have been lost from the Massachusetts manufacturing sector. Unemployment has persisted at the 7-8 percent level while the national level has been decreasing and currently stands at close to the 5 percent level. The approximately 225,000 unemployed results in an eroding tax base and a reduction in tax receipts from corporations and individuals. Furthermore, chronically

unemployed become recipients of public benefits in one form or another, thereby placing additional tax burden on those who are employed.

Increasing state and local expenditures have been of widespread concern and the subject of privately sponsored studies distributed by organizations such as the Massachusetts Taxpayers Foundation and the First National Bank of Boston.

Many indicators show that the national economy is improving. Profits for the third quarter of 1972 have been up generally, and the national employment situation has been improving. Wage and price controls appear to be fulfilling the objectives originally set for them.

How and to what extent improvement in the national economy will affect Massachusetts is a subject for conjecture. An improving national picture will certainly benefit the Massachusetts economy which will rise with the economic tide. Many argue that Massachusetts is so closely tied to the national scene that our economic fate is determined by factors beyond our control, that there is little we can do to control our economic destiny. Others contend that history, at this instance, is not necessarily an accurate predictor of the future. They argue that singular policies and factors have resulted in unique economic trends in Massachusetts which could result in our not following a national upward economic momentum or lagging far behind it.

The economic truth is probably somewhere between these two extremes. Undoubtedly, an improving national economy will benefit Massachusetts and the other 49 states, which are subject to and part of national economic policies, growth, and statistics. To a significant degree, it can be expected that the Massachusetts economy, whose industrial and economic base is composed of many national and international companies, will follow the national trend, which appears optimistic at this juncture.

There are indications that downward trends in the Massachusetts economy have bottomed out, have at least stabilized, and may be turning upward. For example, State tax collections during the first quarter of Fiscal Year 1973 were \$339,410,565 as compared with \$277,158,168 for the same period a year ago. Unemployment has stabilized, although at a level of 7.4 percent, which could bear considerable improvement. The pool of approximately 10,000 unemployed professional scientists and engineers have, to a great extent, found employment. In far too many cases, however, these jobs have not been in situations where their skills can be best utilized for productivity of The Commonwealth and the nation. However, a major Massachusetts manufacturing company recently stated that it had trouble locating skilled technicians to meet its expansion plans.

While Massachusetts swings with the national economy, it has significant control over its own economic destiny. Even a rising national economic average is comprised of 50 states which lie either above or below that average. Massachusetts has the choice of leading or lagging the national average in its economic recovery, or falling above or below the national economy as a whole.

To accomplish this feat, it will require reduction or elimination of factors which depress the economy and fortification and amplification of progressive factors which stimulate the economy.

Factors which tend to depress the Massachusetts economy are:

- (a) High and rapidly increasing public expenditures, both state and local.
- (b) High cost of doing business in Massachusetts resulting from wages, taxes, environmental regulations and energy costs.
- (c) Increasing and uncertain personal and property taxes.

Positive factors which affect the Massachusetts economy and which offer potential for the future are:

- (a) A skilled and educated work force, particularly at the professional and craftsman level.
- (b) Natural resources to support commerce (seaport and airport) and tourism.
- (c) Strong educational institutions which are economic factors in themselves and also have contributed to the economy by spin-offs such as Route 128.
- (d) The prevalence and continued potential for high value-added manufacturing industries.
- (e) A strong service economy with international recognition of its hospitals, financial institutions, and insurance companies.

An Economic Task Force was formed by the Governor in early 1972. Recommendations from this Task Force were included in an Economic Message by the Governor on March 13, 1972, at which time he forwarded to the Legislature several specific legislature proposals for economic development. The Legislature made into law the following:

- A bill authorizing District Planning Commissions to act as Economic Development Regional Commissions.
- A bill authorizing municipalities to create Economic Development and Industrial Corporations.
- A bill authorizing municipalities to pledge their faith and credit to industrial financing authorities.
- A bill increasing to 3 percent for a temporary period of two years the present 1 percent investment credit under the corporation excise for capital investment by manufacturing and research and development firms in plant and equipment as a means of stimulating the creation of new job opportunities.
- A bill authorizing municipalities to borrow outside their debt limit for the purpose of lending or granting money to certain economic and industrial development authorities.
- A bill authorizing the expenditure of more than \$500 million for highway construction and road repair projects under the accelerated highway program.

This is a beginning, and more of such policies and legislation will be needed in the next few years. The spirit of cooperation manifested in Task Force operations and subsequently between the executive and legislative branches, between industry and labor, between the public and private sectors bodes well for the future. However, a mechanism or procedure is needed to keep such diverse inputs free-flowing and focussed on solutions of the economic problems of The Commonwealth.

With The Massachusetts economy at a crossroad, this Report is organized to indicate:

- (a) The principal elements affecting the future of the Massachusetts economy and their interlocking relationships.
- (b) By key projections, where the economy is headed.
- (c) By historical data, where Massachusetts has been economically and where it stands now.

PRINCIPAL ISSUES IN THE MASSACHUSETTS ECONOMY

The economic health of Massachusetts is dependent on three principal factors, each important in itself, but even more significant when considered in relation to the other two. These elements are:

State and Local Expenditures

The cost of doing business in the public sector.

This cost has to be kept within reasonable growth limits and not be allowed to run unchecked or it can exceed any tax revenues or revenue sharing funds available.

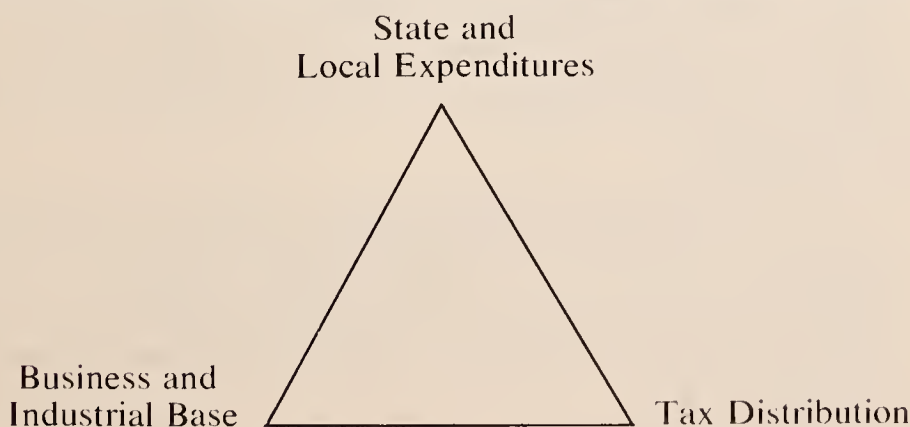
Business and Industrial Base

Business and industry provide employment and tax resources to run public services in government. This economic base pays taxes either directly or through its employees. With a healthy business economy, Massachusetts has a strong tax base. Without one, we have a weak tax base, increased unemployment, and higher taxes per taxable unit.

Tax Distribution

Who pays the bills and in what proportion? This element relates public expenditures to the taxpayer in the private sector and is the immediate concern of the Master Tax Plan Commission. Unfair or excessive tax burden on one or another element in the private sector can result in a weakening of the tax base, emigration and/or unemployment.

The interrelationship of these three elements is seen as follows:



Each of the elements is related to the other two directly and through feedback onto itself. For example:

- If the Business and Industrial Base is weakened by companies closing, leaving the state, or losing business competitively, unemployment results. Unemployment or welfare benefits cause state expenditures to rise, feeding through more tax requirements to

employed companies and individuals. Increased tax pressures worsen the Business and Industrial Base, reinforcing the cycle all over again.

- If State and Local Expenditures rise too steeply, the tax burden imposed on the Business and Industrial Base causes the same situation as above, resulting in increasing public expenditures and again repeating the cycle.
- Inequitable Tax Distribution can itself stimulate a closed cycle by imposing an unjust burden on specific elements in the economy, causing industry and/or individuals to become unemployed, leave the state, or perhaps never enter it. Public expenditures per taxable unit then increase, reinforcing the cycle.

In these examples a downward spiraling effect results in increasing state costs, decreasing tax base and excessive burden on some elements of the tax paying community. It is just such a downward spiral that The Commonwealth has been undergoing in the past few years.

The spiral can be reversed to achieve upward momentum by improvement in each of the three key areas individually and collectively. Specific recommendations are:

State and Local Expenditures

Expenditures must be held under control. Modern management procedures including budgeting and cost control techniques should be installed to assist in this process. Additions to the public payrolls should be held to a minimum and attrition utilized to pare down as much as practicable. Phase II of the State reorganization plan is considered critical to reduce overlap and duplication as is installation of a Program Management System throughout all levels of State Government.

Business and Industrial Base

The State Department of Commerce and Development should be strengthened to attract new industry and to deal more intimately with the problems of existing Massachusetts industries. Review should be made of the causes underlying the high cost of doing business in Massachusetts and action taken to eliminate public policies or regulations which serve to impose competitive restraints on Massachusetts industry.

Tax Distribution

A Master Tax Plan for Massachusetts is necessary and long overdue. Tax revenue by category should be fixed in Master Tax Plan legislation during the 1973 session of the Legislature. A Master Tax Plan is important not only in itself but to remove the uncertainty which currently surrounds this major facet of the Massachusetts economic climate.

FISCAL PROJECTIONS

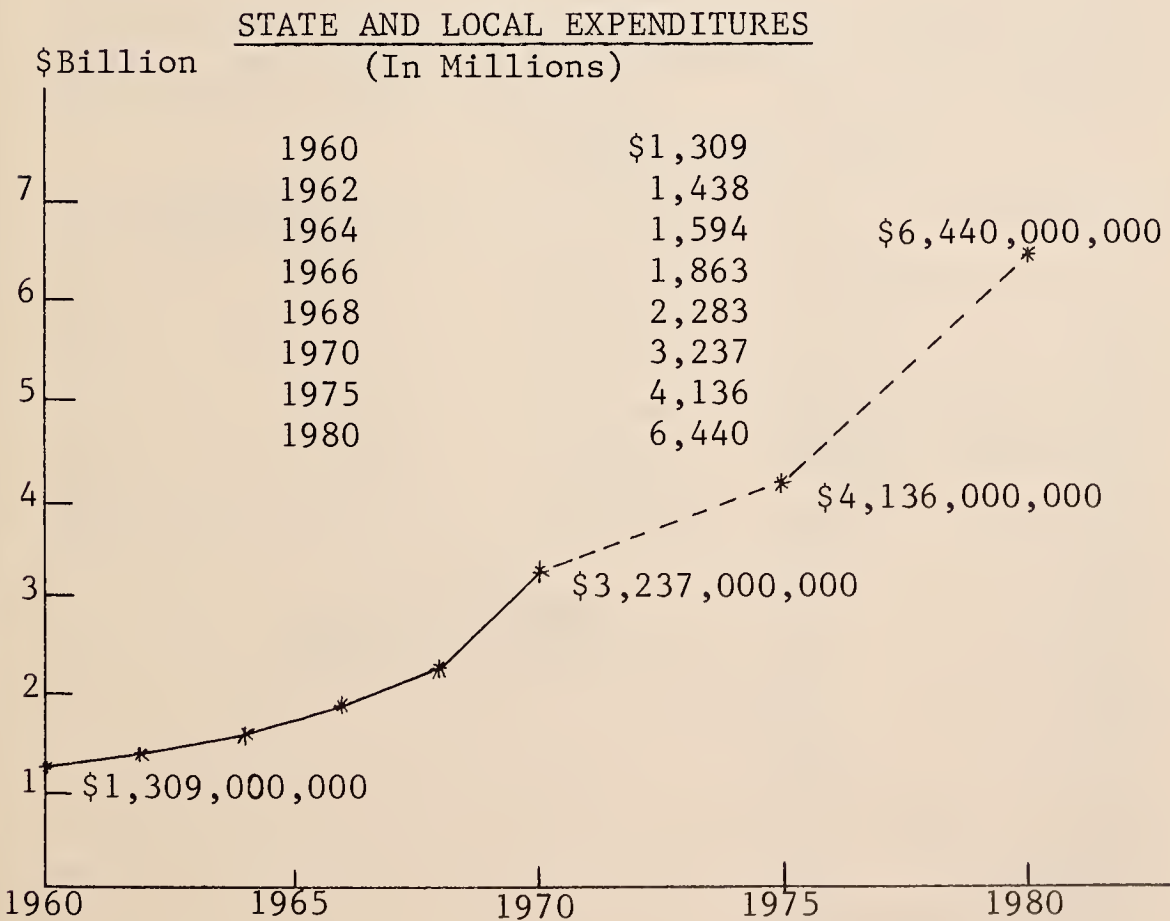
Based on historical data since 1960, extrapolations have been made through 1980 of key fiscal items bearing on the Massachusetts economy. These projections are shown in the following charts. Standard statistical techniques were employed and no additional factors or judgements

introduced. As with any such extrapolations, the graphs do not necessarily indicate what *will* happen, but what probably will happen unless the trends are changed by *some action*.

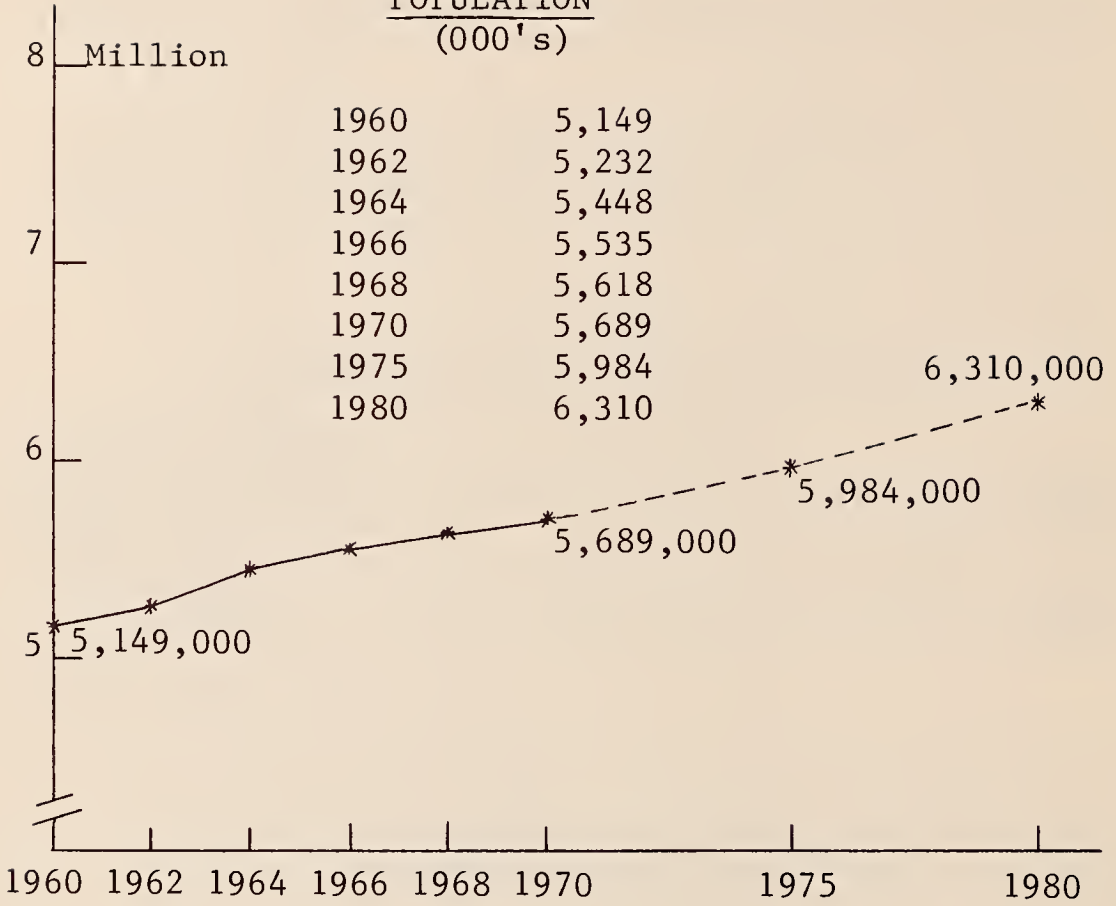
Of particular significance is the rising cost of public services in Massachusetts *per capita*. The table immediately following shows that the per capita share of state and local expenditures is approximately doubling every 10 years from \$250 per person in 1960 to \$568 in 1970 and expected to be \$1,020 in 1980.

Per Capita Cost of Public Services in Massachusetts

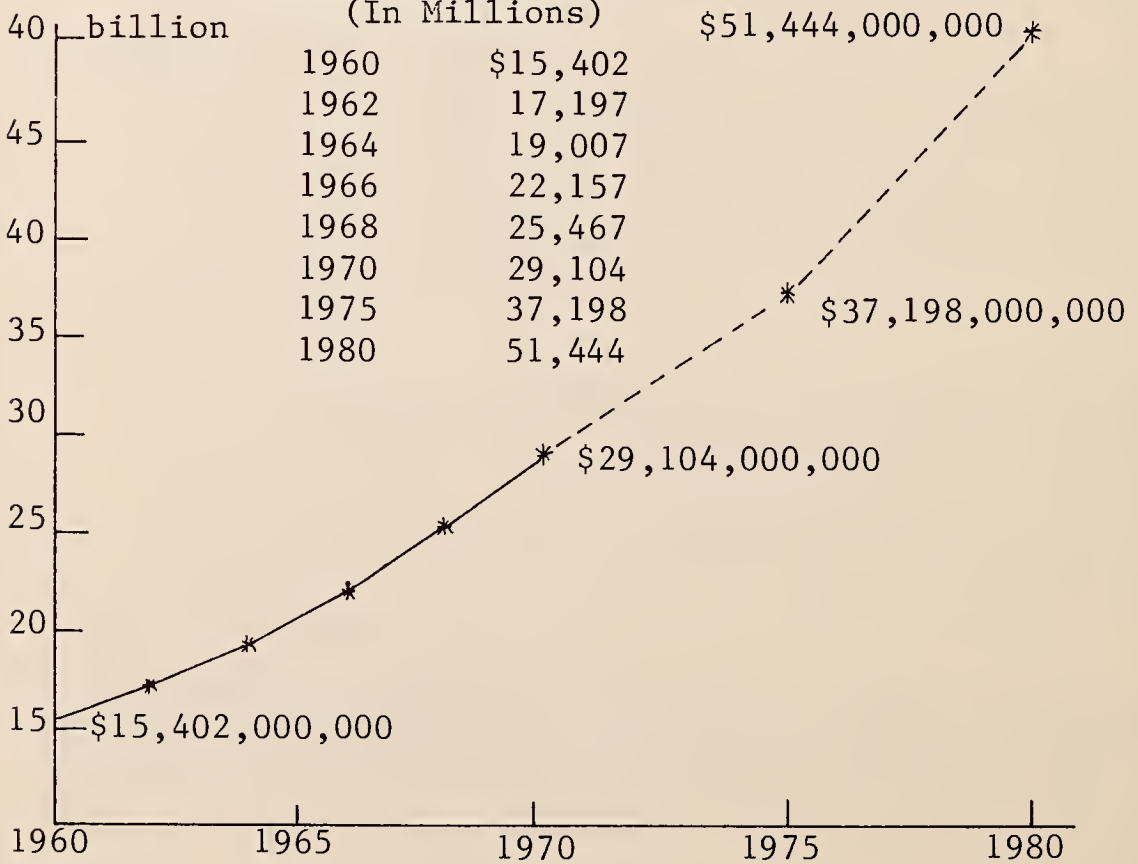
<u>Year</u>	<u>State and Local Expenditures/Population</u>
1960	\$ 250 per capita
1970	568 per capita
1975	689 per capita
1980	1,020 per capita



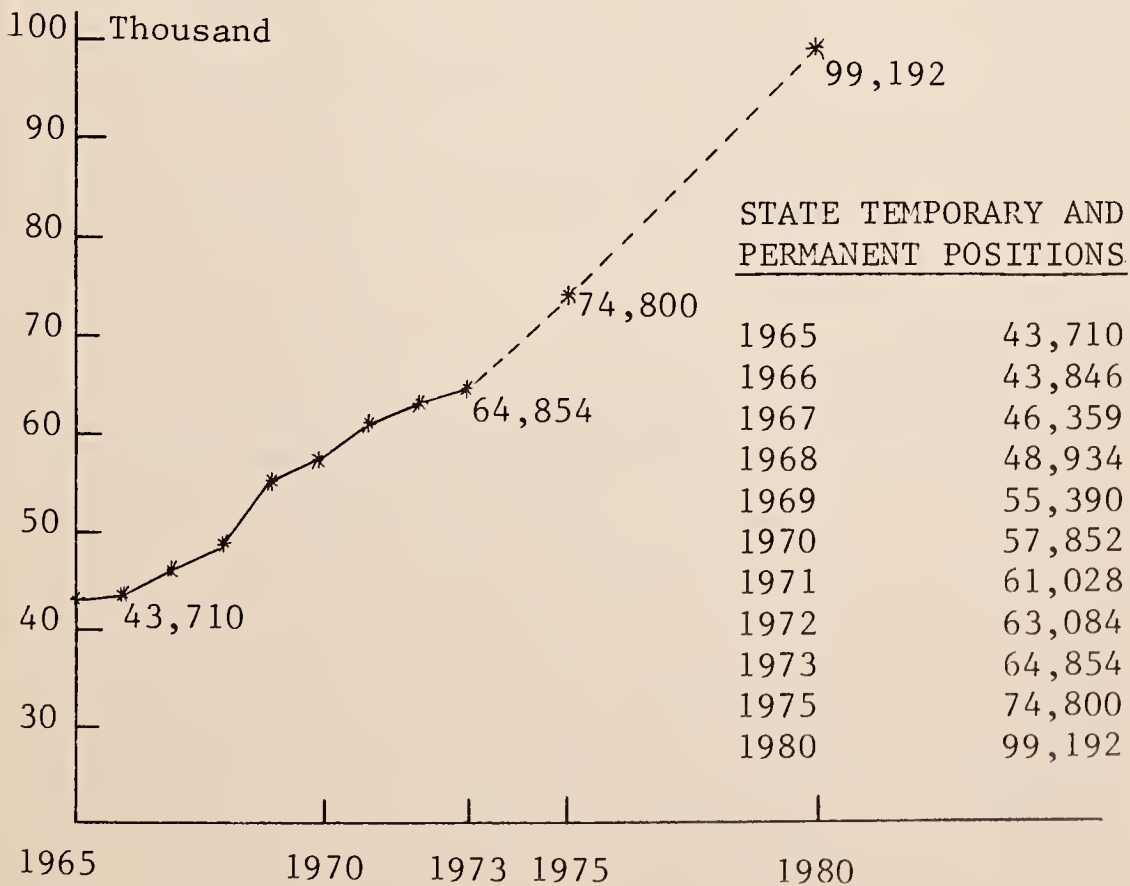
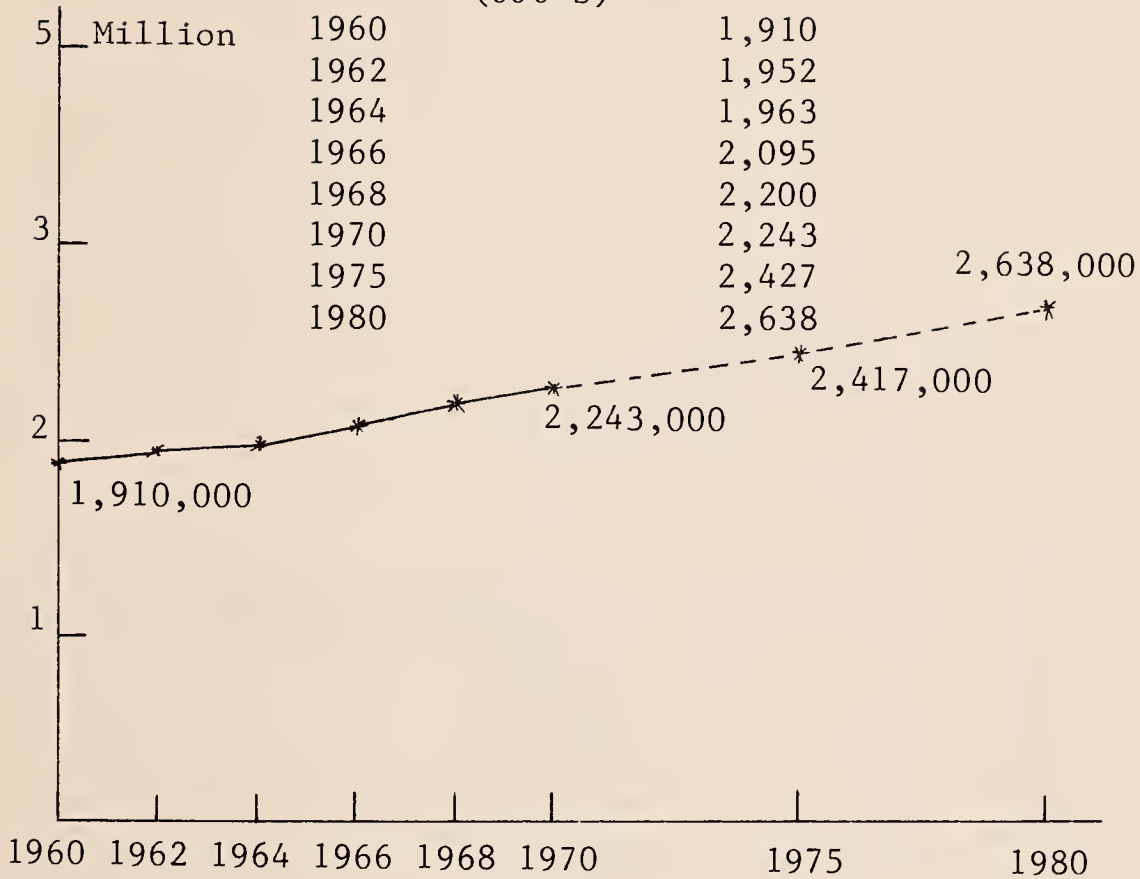
POPULATION
(000's)



GROSS STATE PRODUCT
(In Millions)

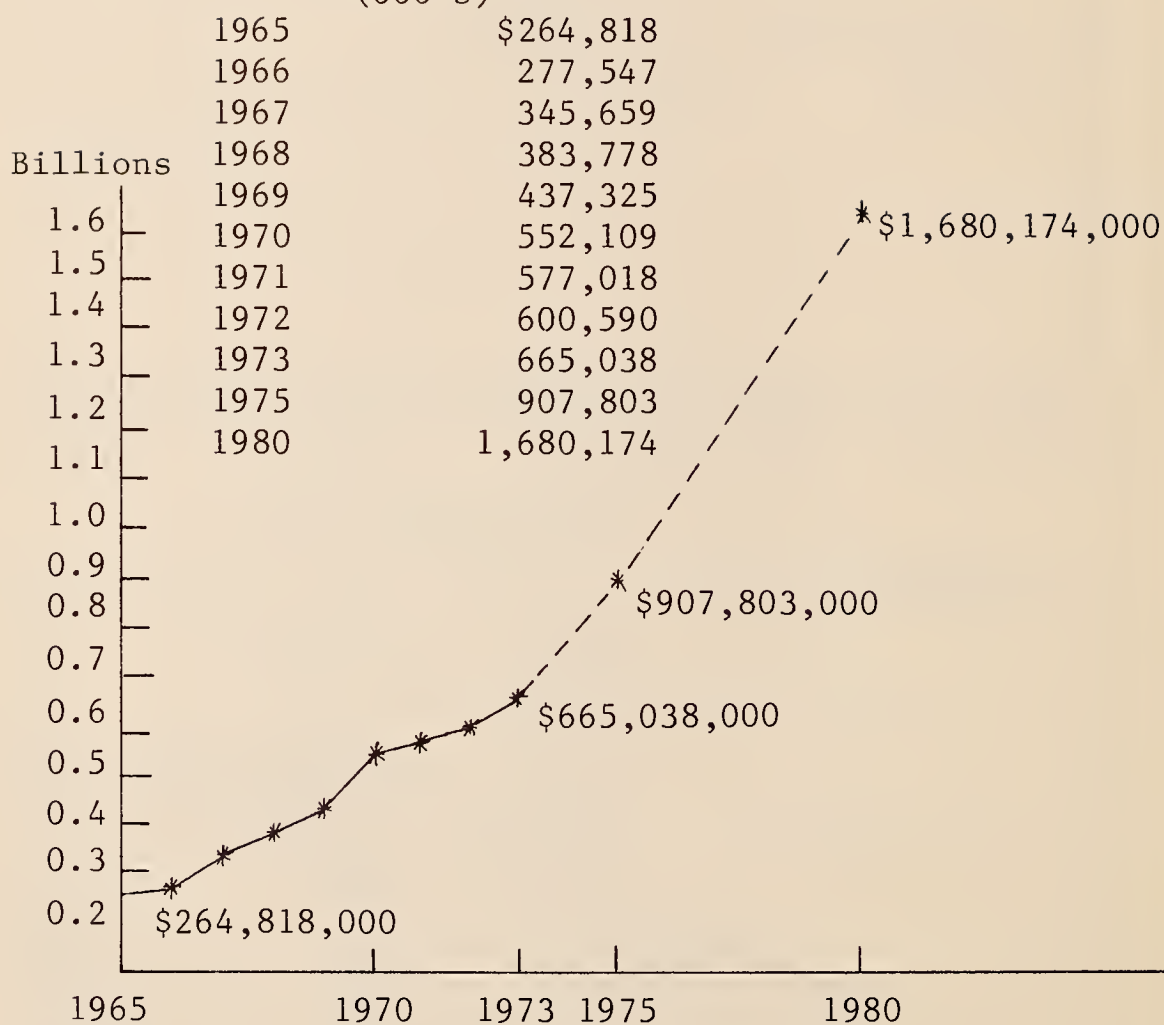


TOTAL EMPLOYMENT
(000's)



STATE SALARIES AND RELATED COSTS

(000's)



**THE MASSACHUSETTS ECONOMY
DATA AND ANALYSIS**

GENERAL POPULATION CHARACTERISTICS

Population Trends

Civilian population in Massachusetts was over 5.1 million in 1960, is estimated at close to 5.5 million in 1970 and will approach 6 million by 1980. From 1960 to 1970 the state dropped from ninth to tenth place in the nation. However, the Bay State's population grew faster in the decade just past than in the decade of the fifties — going from a 9.8 percent increase to a 10.5 percent increase. Massachusetts was one of 24 states that had an immigration of population in the sixties.

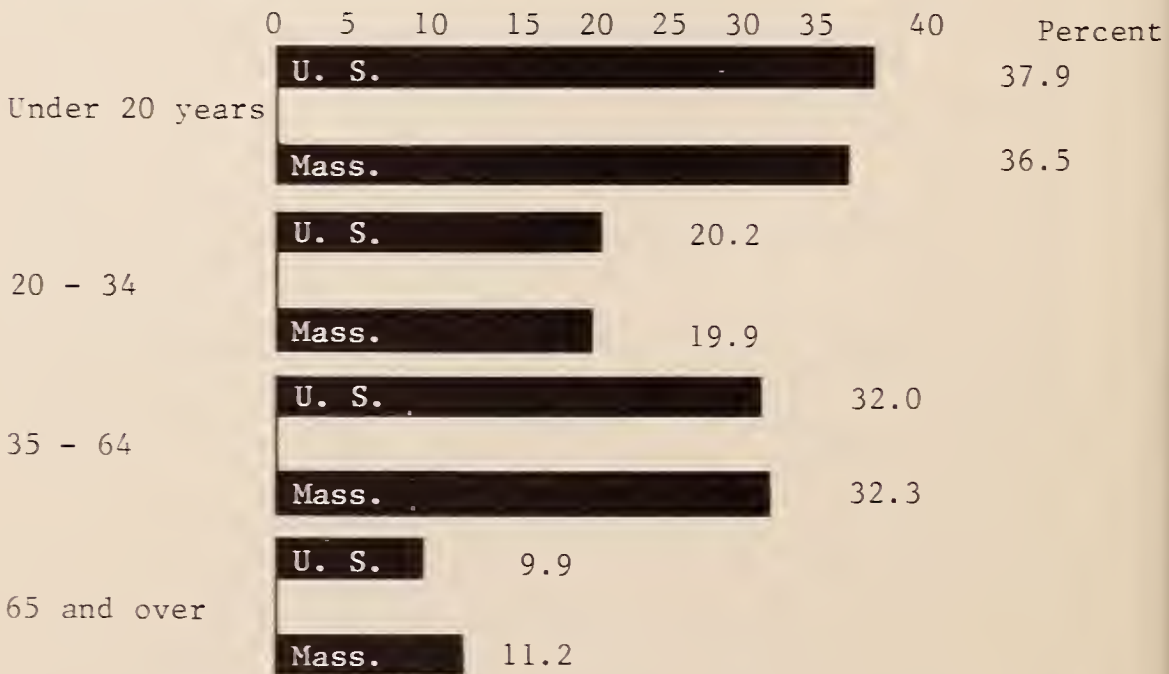
In 1971, 85 percent of the state's population was in urban areas and 15 percent in rural areas. However, following a growing national trend, the state is experiencing a flight from the center city to the suburbs. Five cities have population greater than 100,000 and all of them lost residents in the last decade.

<u>Area</u>	<u>1970</u>	<u>1960</u>	<u>Amount of Change</u>	<u>Percent Change</u>
Boston	641,071	697,197	-56,126	-8.1
Worcester	176,572	186,587	-10,015	-5.4
Springfield	163,905	174,463	-10,558	-6.1
New Bedford	101,777	102,477	-700	-0.7
Cambridge	100,361	107,716	-7,355	-6.8

Source: Annual Manpower Planning Report, January 1972, Division of Employment Security.

Trends — By Age

AGE DISTRIBUTION IN MASSACHUSETTS 1970



Source: Compiled from U.S. Department of Commerce, Bureau of the Census statistics.

The age distribution of The Commonwealth's population follows that of the nation very closely, with 1.4% fewer under 20 and 1.3% more over 65.

Trends — By Race

In the decade of the sixties the nonwhite population in the state increased by 68.7 percent and Negro population by 57.2 percent. The in-movement of Negroes was largely from the South. The second largest nonwhite population group is Chinese, and growing fast is the Spanish surname population. About 55 percent of the nonwhite population in The Commonwealth live in the city of Boston, with the rest distributed throughout the remainder of the state, mostly in the larger cities. The following table shows the distribution of these racial groups in 1970.

Minority Population — 1970

Area	Total Population	Nonwhite					
		All Nonwhite		Black		Spanish Surname	
		Amount	Percent	Amount	Percent	Amount	Percent
Massachusetts	5,689,170	211,546	3.7	175,817	3.1	64,480	1.1
Boston SMSA (includes the							
City of Boston	2,753,700	150,959	5.5	127,035	4.6	28,500	1.0
City of Boston	641,071	116,362	18.2	104,707	16.3	25,000	3.9

Source: Federal Census, Except for Boston City and SMSA Figures Which are Massachusetts Division of Employment Security Estimates. And Annual Manpower Planning Report, January 1972, DES.

Work Force

During the last decade, population and total work force have grown more than total employment giving The Commonwealth an increase in the number of unemployed.

Population and Civilian Work Force by Labor Force Status
For Selected Years
(in 000's)

Item	1960	1965	1969	1970
Population	5,149.3	5,295.3	5,503.0*	5,689.2
Total Work Force	2,265.5	2,357.0	2,581.3	2,618.8
Employment				
Total	2,146.7	2,240.9	2,475.5	2,476.3
Nonagricultural				
W & S	1,907.4	2,024.4	2,277.5	2,280.9
Unemployment	114.6	114.6	100.5	137.7

*Estimated

Source: Annual Manpower Planning Report, January 1972, Division of Employment Security.

EMPLOYMENT

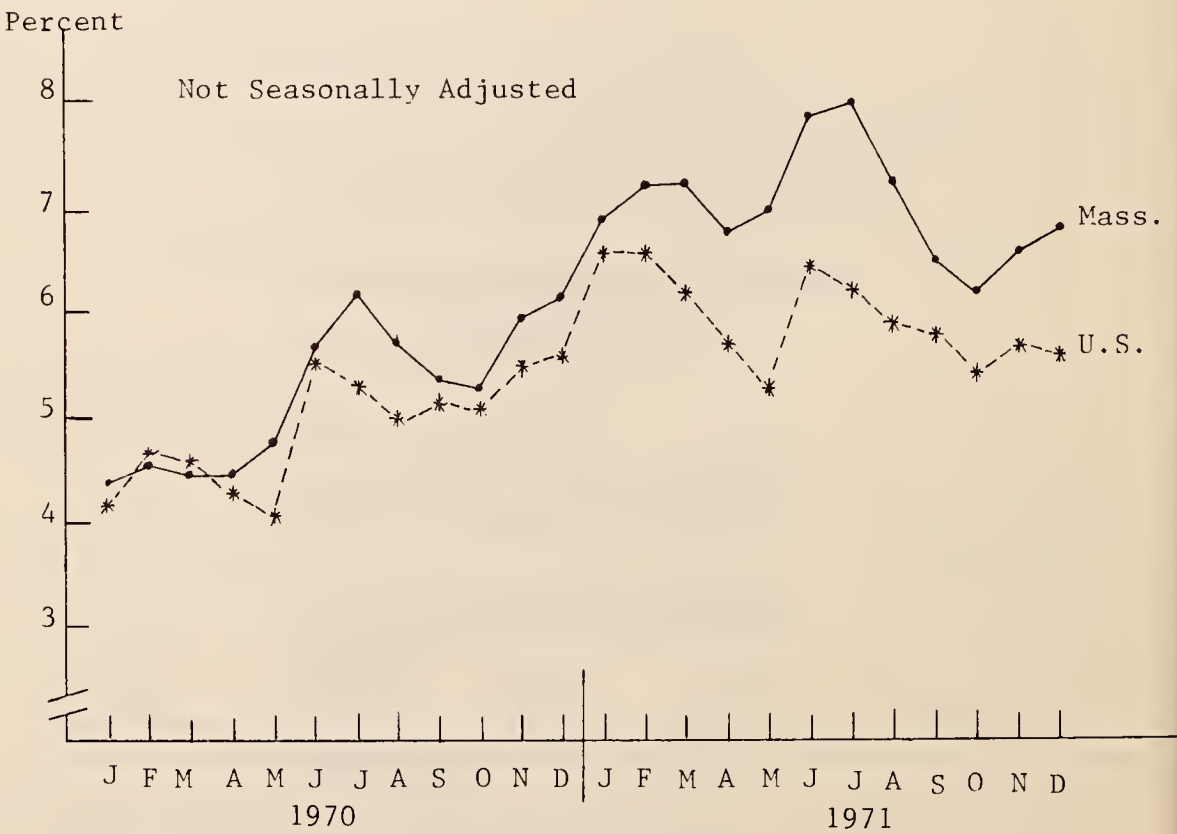
The state of the economy of Massachusetts continued to worsen during 1971. Unemployment averaged 185,000 — a third higher than in 1970. An all-time peak in unemployment of 213,000 occurred in June, the highest level since the Great Depression. Average rate of unemployment for 1971 was 7.0 percent as against 5.3 percent in 1970.

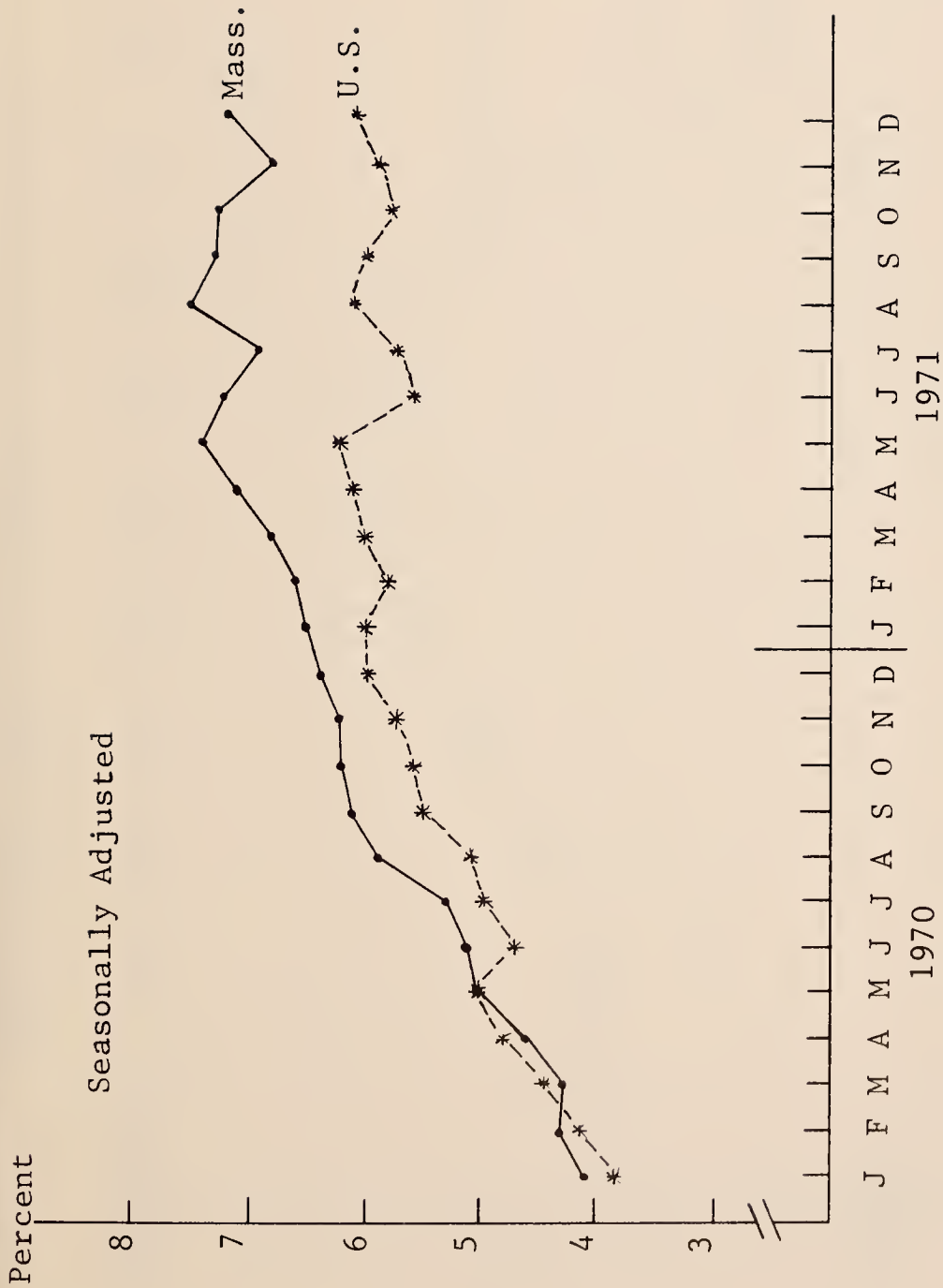
Reflecting the deterioration in the economy, all the 8 major Standard Metropolitan Statistical Areas in Massachusetts were classified at the end of 1971 as areas of substantial unemployment — above 6 percent.

Employment dropped by 1.1 percent to 2,448,800 — the first annual decline since 1963, yet the potential work force continued to grow reaching an all-time high of 2,660,200 in December.

Manufacturing has not kept pace with the national movement. It continued its long-term drop in the state, displacing 46,200 workers. The gain of 20,300 in nonmanufacturing staffs compensated for less than half this loss. During the 1960's, contractions in manufacturing forces had been significantly offset by expansion of nonmanufacturing job rolls.

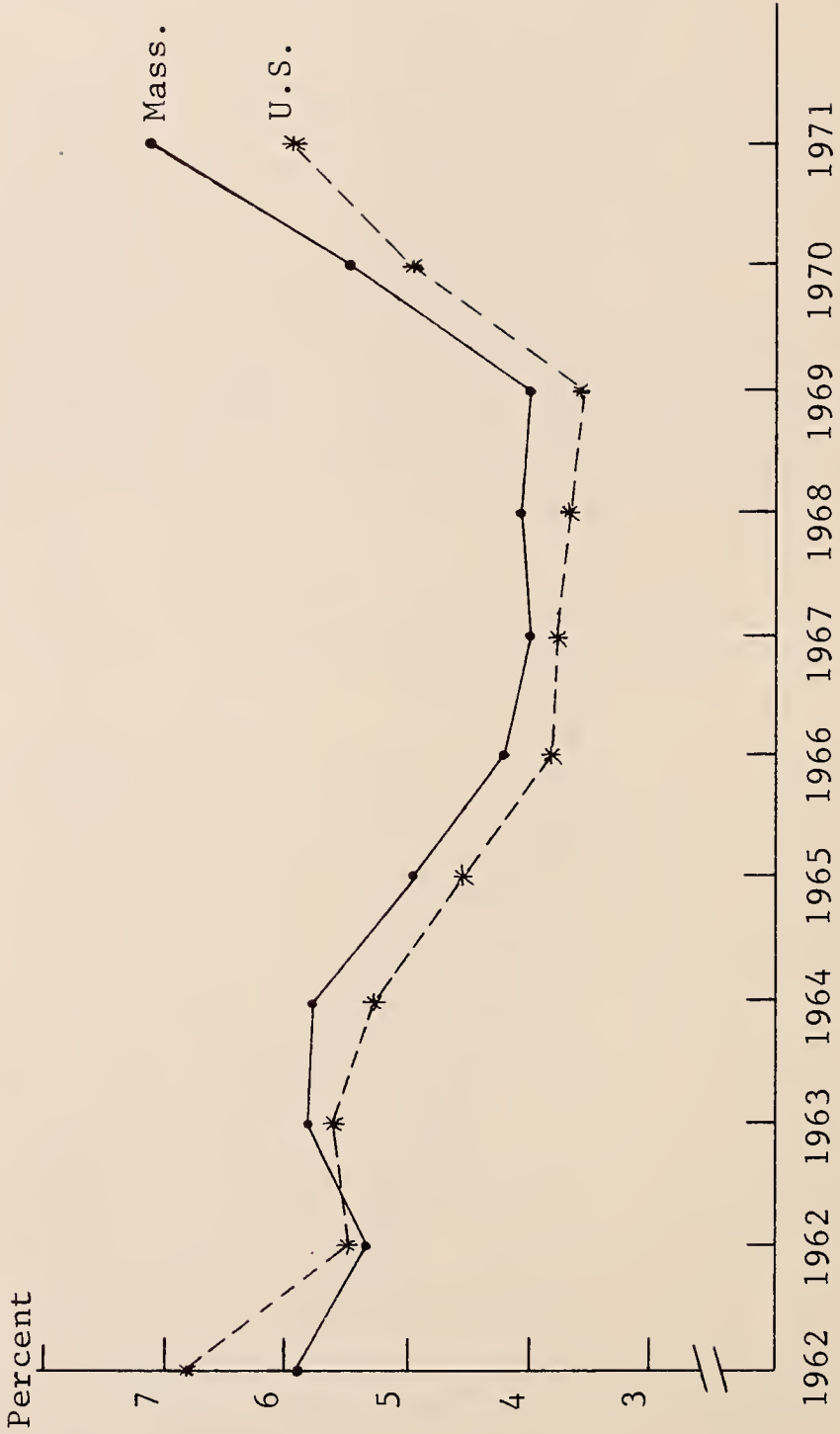
UNEMPLOYMENT RATES
Monthly 1970-1971





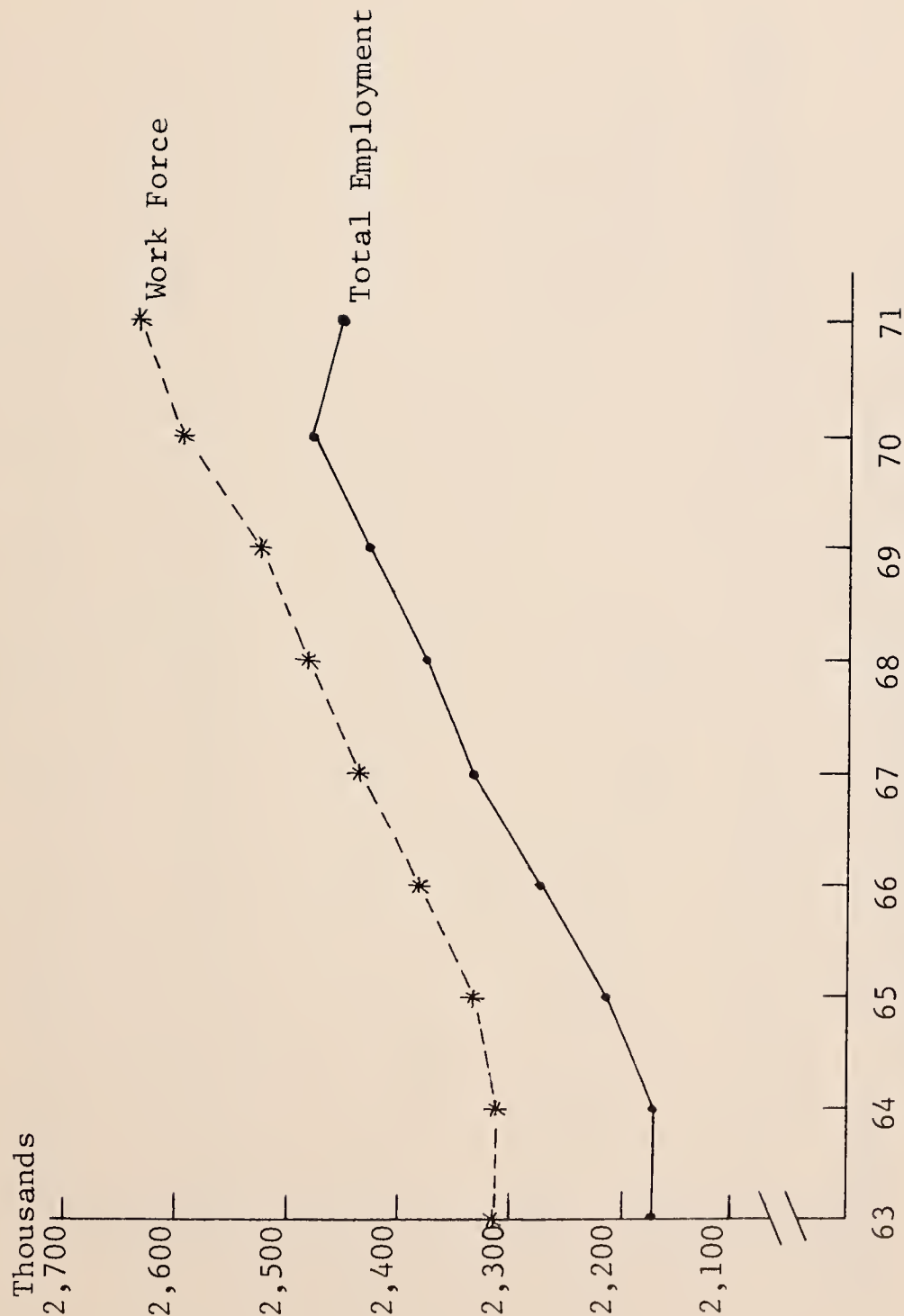
Source: Massachusetts Trends in Employment and Unemployment
January, 1972.

UNEMPLOYMENT RATES
MASSACHUSETTS AND U.S.
1961-1971

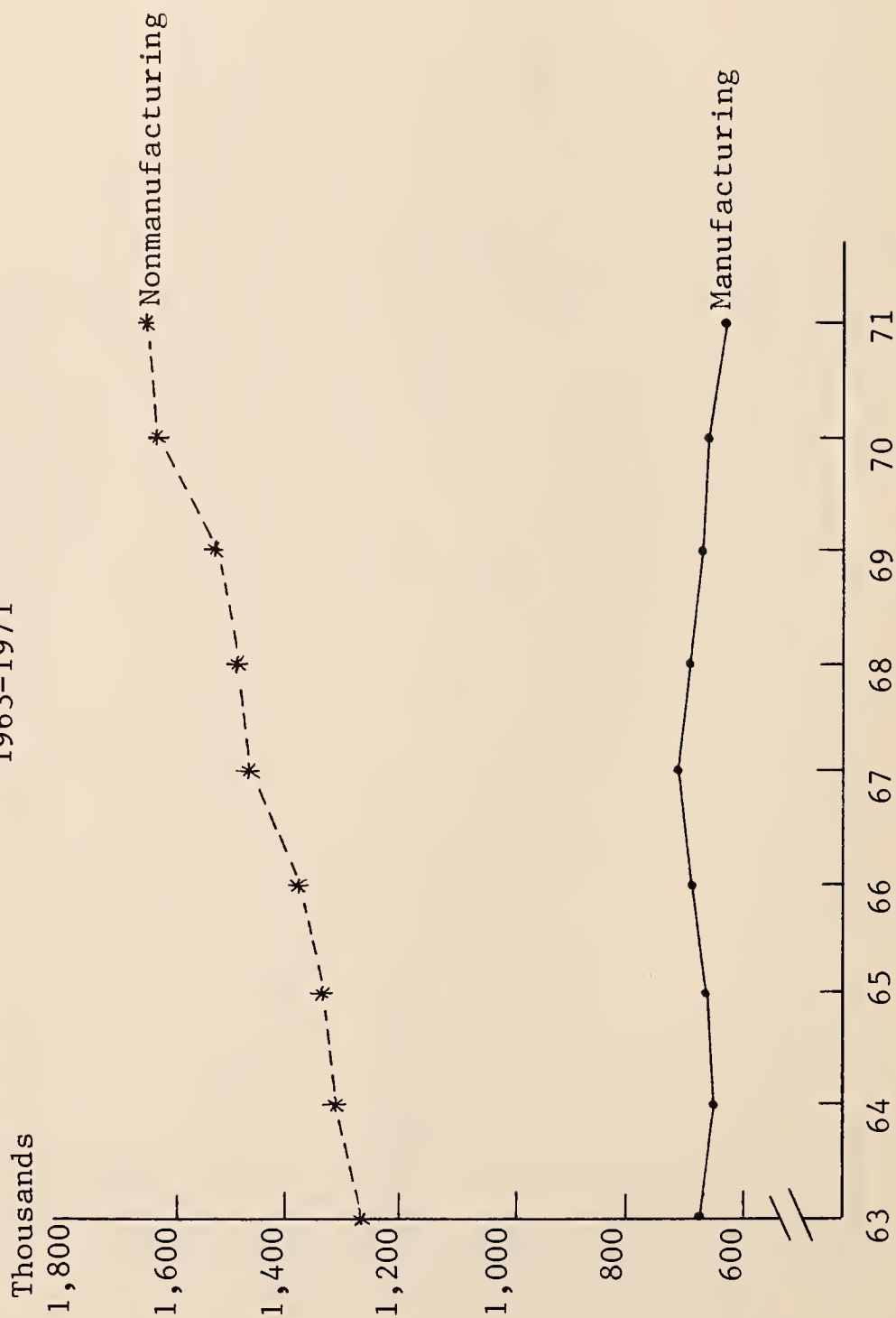


Source: Massachusetts Trends in Employment and Unemployment
January 1972.

WORK FORCE and TOTAL EMPLOYMENT
1963-1971

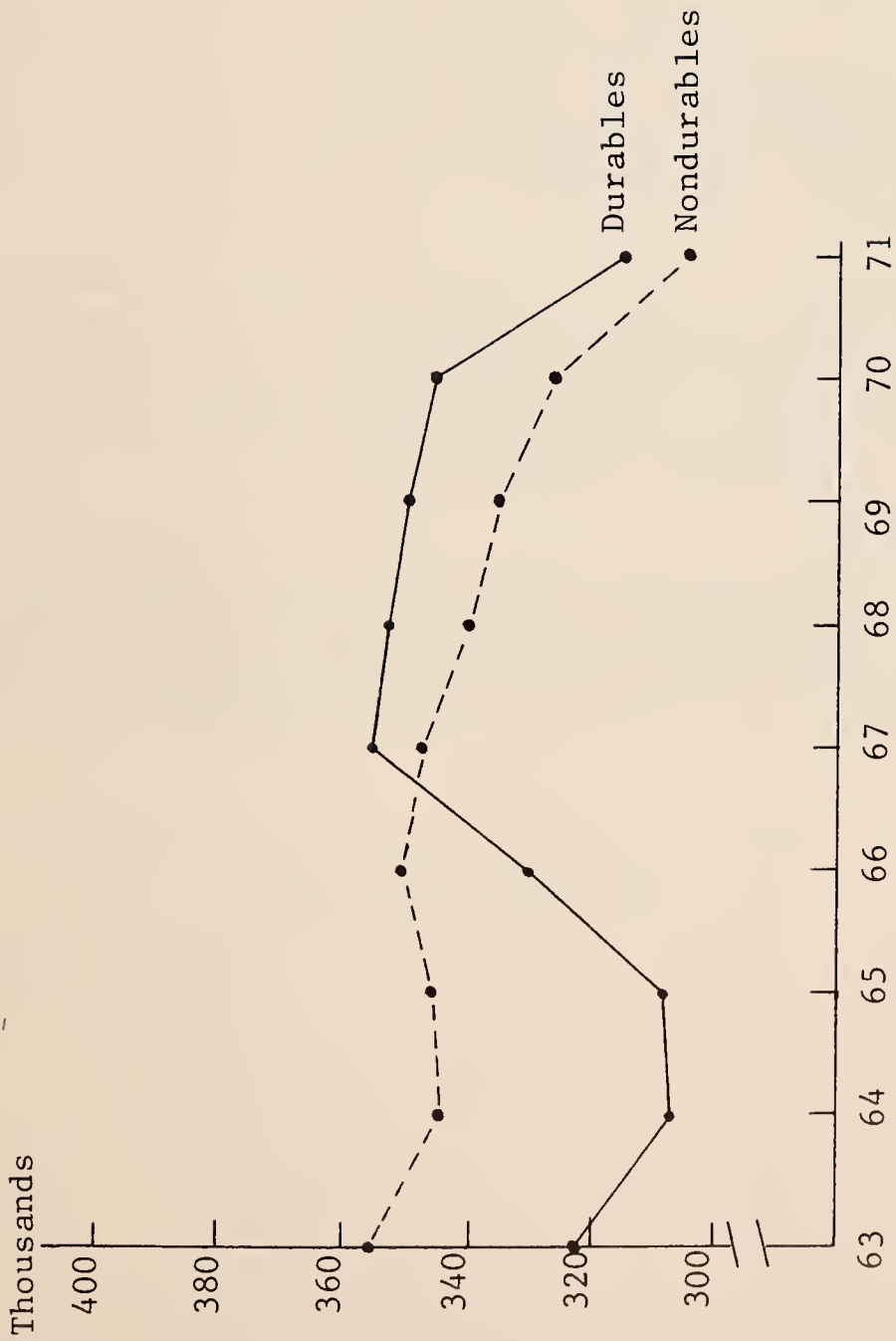


EMPLOYMENT IN MANUFACTURING AND NONMANUFACTURING 1963-1971



Source: Annual Manpower Planning Report 1972
Division of Employment Security

EMPLOYMENT IN DURABLE AND NONDURABLE GOODS
1963-1971



Source: Annual Manpower Planning Report 1972,
Division of Employment Security

Characteristics of the Unemployed

An important concern for The Commonwealth is — Who are these unemployed? What are their characteristics? An Arthur D. Little study has estimated that in Massachusetts during the 1970-72 period, 25,000 jobs directly related to defense spending have been lost, plus 5,000 civilian jobs at military installations. An additional 15,000 to 30,000 nondefense jobs have been lost due to lower levels of consumer and business spending. Of these, it is estimated that a little over one quarter of those are professional workers, about one half are skilled production workers, and a little under one quarter of those unskilled workers. The employment problem is further compounded by an estimated 40,000 veterans returning to the area seeking work. The large number of highly trained professional workers, administrators, engineers, and technical people, is of particular concern because current training and compensation programs are not geared for them even though they comprise one of the region's prime assets.

Many shoe and textile workers found themselves unemployed when their skills became obsolete or underutilized because of automation or foreign competition. Decline in employment in the fishing industry could be attributed in part to the obsolescence of equipment used by a large number of independent fishermen, foreign competition and the reduced input of younger men into the work force.

Age and Race

While unemployment is higher in the state than in the nation, it is highest for teenagers with a rate of 17.1 percent. The rate for Negroes and other minority races is 13.0 percent. This average unemployment rate for minority races is 4 percent higher than the national average of 9.9 percent.

1971 Unemployment Rates

	<u>U.S.</u>	<u>Mass.</u>
TOTAL	5.9%	6.6%
White	5.4	6.4
Men 20 years & over	4.0	4.5
Women 20 years & over	5.3	6.6
Both sexes, 16-19 years	15.1	17.1
Negro and other races	9.9	13.0

Source: Graphic Profile of Employment & Unemployment 1971; Report 402 U.S. Department of Labor Bureau of Labor Statistics.

Outlook by Industry and Occupation

The Division of Employment Security in *Massachusetts Manpower Requirements to 1975* has made employment projections by occupation and by industry. A major conclusion to be drawn from this Report's projections of industrial employment to 1975 is that the shift in the composition of Massachusetts employment so evident during the past will continue into the future. This shift is toward the service sectors — personal, business, medical and educational, private as well as governmental — and away from employment in goods production. Consequently, agriculture and manufacture will require fewer workers than in 1968.

The occupational composition of the state's work force has undergone pronounced change in the past and will continue to shift during the decade of the 1970's, away from low-skilled fields of work and toward an occupational structure emphasizing service needs and professional, technical, and clerical skills.

Projections

Projections of the future trend in unemployment recently made by the Division of Employment Security, and Edwin Estle of the New England Telephone Company, indicate that the rate will, at least, not worsen, and in most instances the state will see some improvement. However, as of June 1972, the seasonally adjusted rate has risen to 7.5 percent. That is 2 percent above the national average, with the gap between state and nation widening.

A recent report by the First National Bank of Boston has suggested that expanding industries in Massachusetts have developed a greater relative reliance on capital. This, together with the fact that labor-intensive industries are continuing to reduce employment, suggests that the gap will not be closed easily.

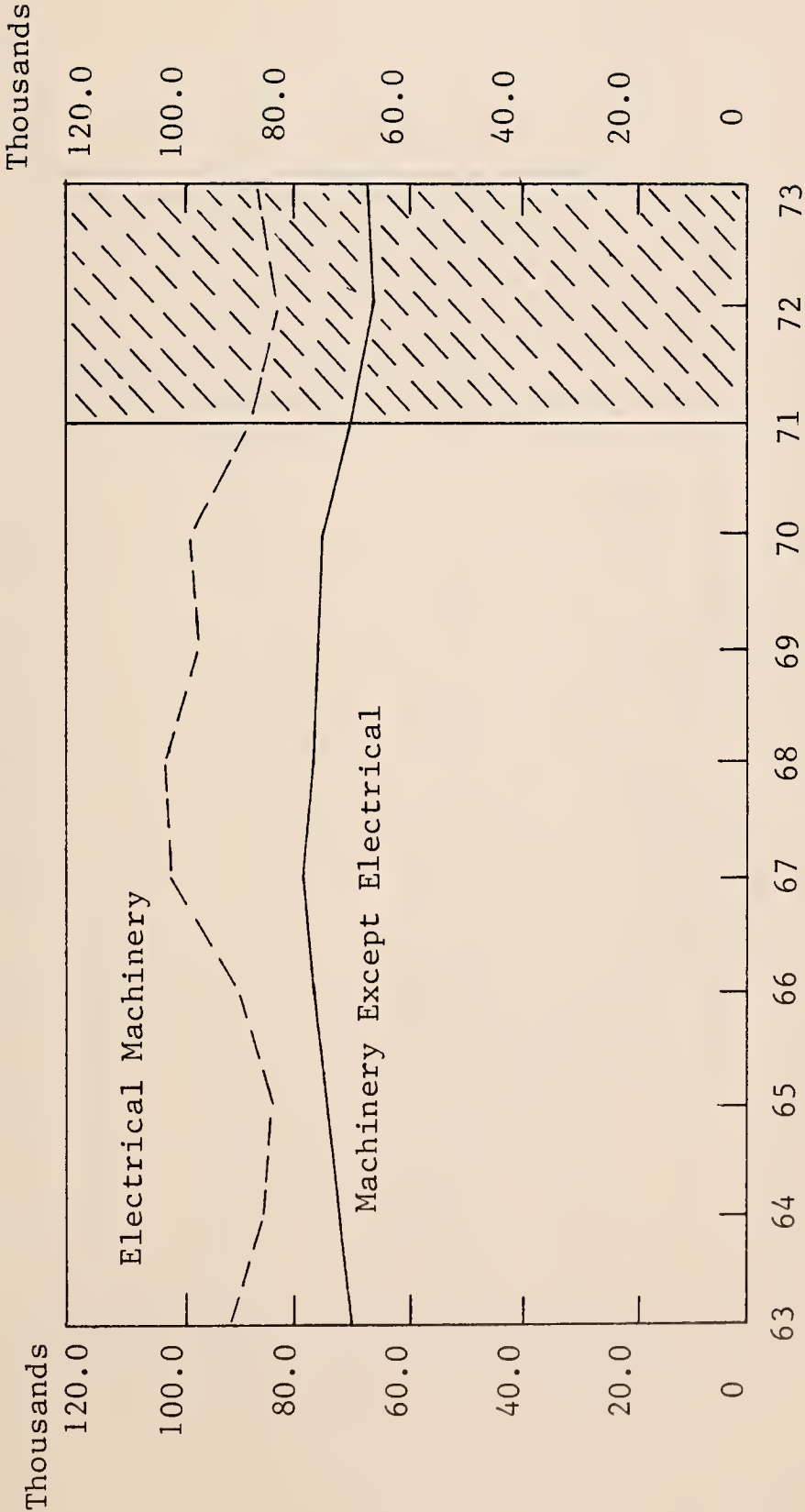
WORK FORCE, EMPLOYMENT AND UNEMPLOYMENT RATES
OF MASSACHUSETTS LABOR MARKET AREAS
YEAR 1970 vs. YEAR 1971

	Work Force (in 000's)		Total Employment* (in 000's)		Unemployment Rate	
	Annual 1970	Average 1971 Percent Change	Annual 1970	Average 1971 Percent Change	Annual 1970	Average 1971
Massachusetts	2,618,800	2,636,200 + 0.7	2,481,100	2,451,200 -1.2	5.3	7.0
SMSA'S						
Boston	1,463,800	1,468,600 + 0.3	1,401,400	1,383,100 -1.3	4.3	5.8
Worcester	149,500	149,200 - 0.2	142,200	138,400 -2.7	4.9	7.2
Springfield-Chicopee-Holyoke	223,900	223,900 0.0	209,800	204,900 -2.3	6.3	8.5
Fall River — R.I.	54,800	54,400 - 0.7	51,000	50,000 -2.0	6.9	7.5
New Bedford	66,800	66,200 - 0.9	61,200	60,200 -1.6	8.4	9.1
Lawrence-Haverhill — N.H.	97,800	98,600 + 0.8	91,300	89,500 -2.0	6.6	9.3
Lowell	64,100	65,100 + 1.6	58,700	57,200 -2.6	8.4	12.1
Brockton	63,500	64,200 + 1.1	59,400	58,700 -1.2	6.5	8.6
Fitchburg-Leominster	40,600	41,400 + 2.0	37,800	37,400 -1.1	6.9	9.7
Pittsfield	38,200	38,400 + 0.5	35,900	35,800 -0.3	4.8	6.6
Classified Labor Areas						
Bourne-Wareham	5,640	6,070 + 7.6	5,070	5,210 +2.8	10.1	14.2
Gloucester	12,950	13,200 + 1.9	11,800	11,650 -1.3	8.9	11.7
Greenfield	18,900	18,650 - 1.3	17,650	17,050 -3.4	6.3	8.6
Milford	12,950	13,100 + 1.2	11,450	11,450 0.0	11.6	12.6
Marlboro	23,400	23,900 + 2.1	22,000	21,900 -0.5	6.0	8.4
Newburyport	13,600	14,100 + 3.7	12,200	12,050 -1.2	10.3	14.5
North Adams	16,200	15,650 - 3.4	14,750	13,850 -6.1	9.0	11.5
Plymouth	9,520	9,810 + 3.0	8,430	8,430 0.0	11.4	14.1
Provincetown	2,260	2,530 +11.9	1,890	1,990 +5.3	16.4	21.3
Taunton	29,400	29,800 + 1.4	27,400	27,450 +0.2	6.8	7.9
Ware	6,380	6,870 + 7.7	5,820	5,870 +0.9	8.8	14.6

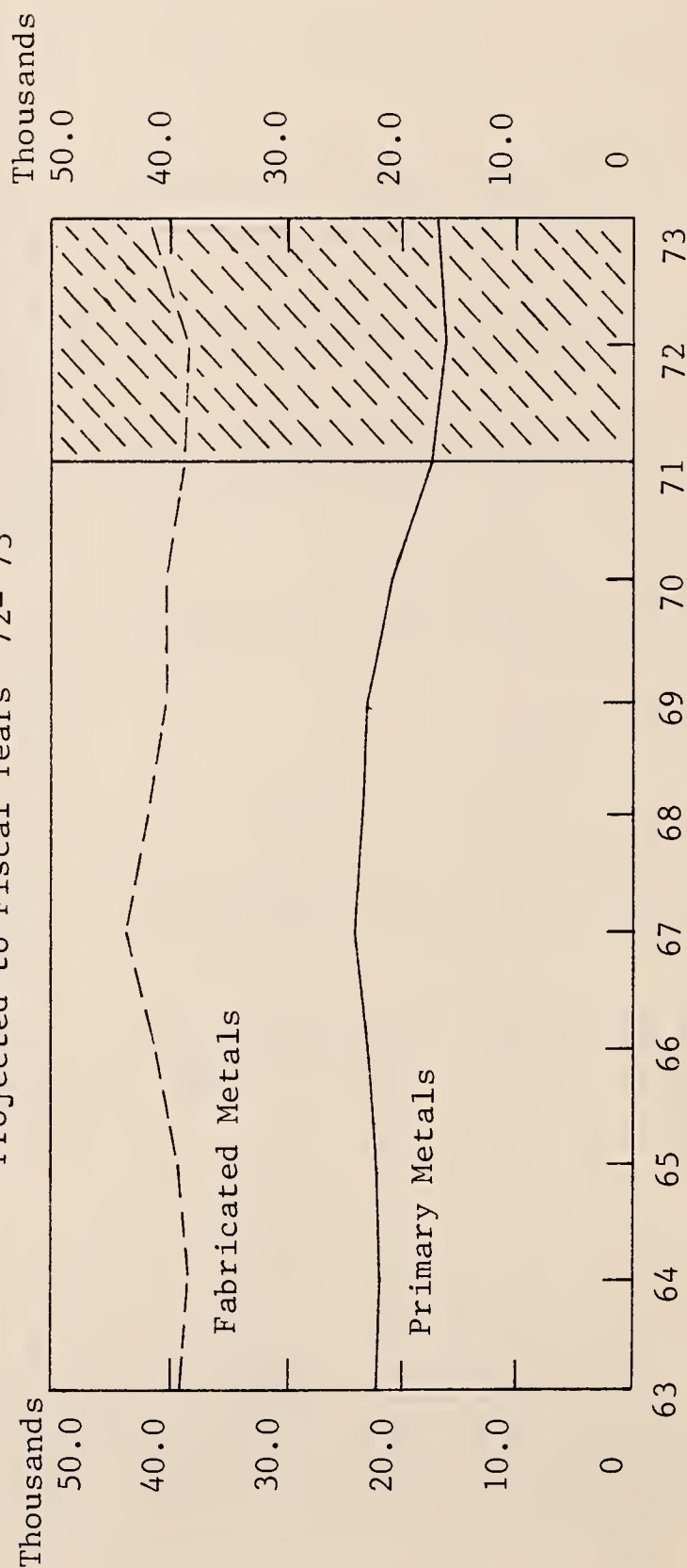
*Includes labor disputes

Source: Annual Manpower Planning Report, 1972, DES.

Employment in Electrical Machinery
and Machinery (Except Electrical)
Fiscal Years '63-'71
Projected to Fiscal Years '72-'73

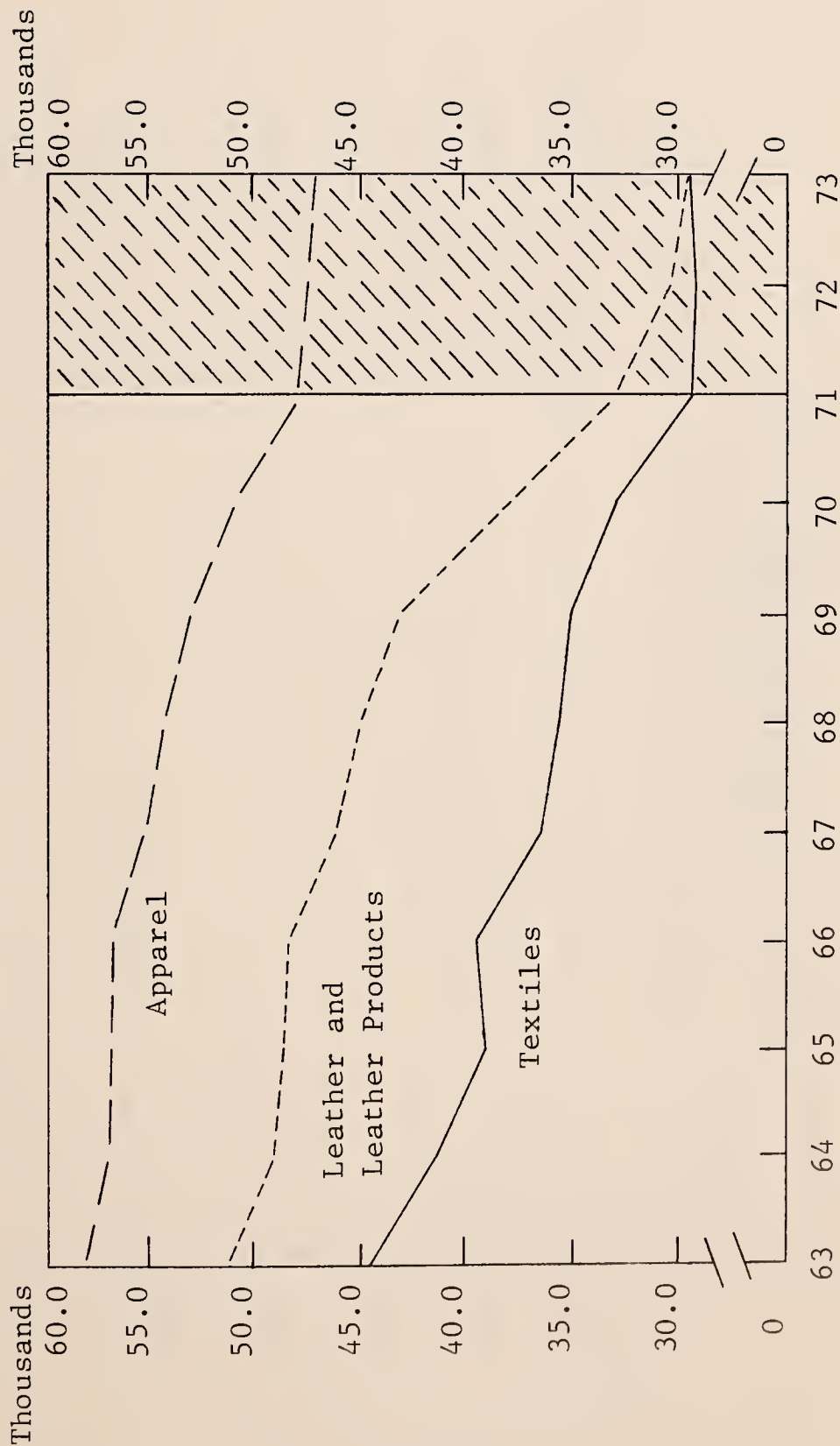


Employment in Primary
and Fabricated Metals Industries
Fiscal Years '63-'71
Projected to Fiscal Years '72-'73

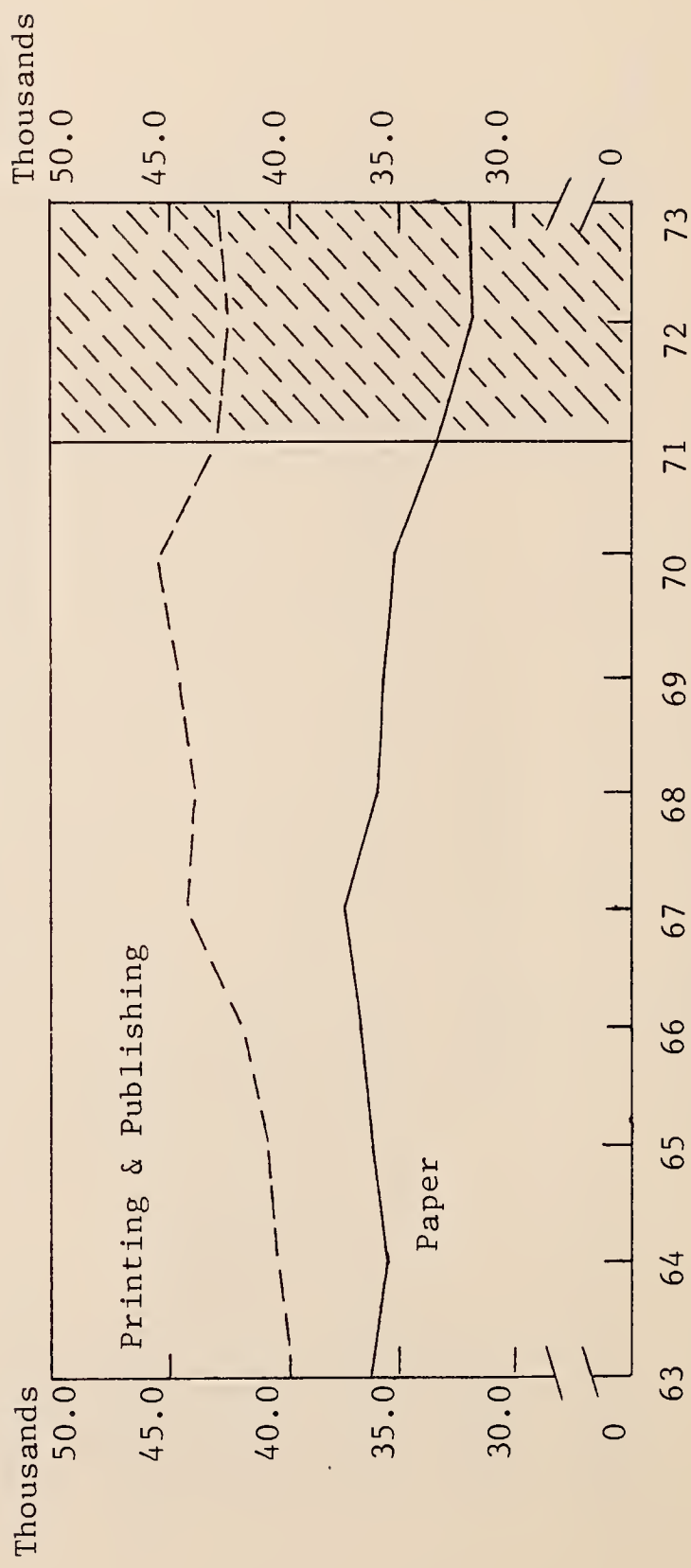


Source: Annual Manpower Planning Report, 1972, DES.

Employment in Textiles,
Apparel and Leather and Leather Products
Fiscal Years '63-'71
Projected to Fiscal Years '72-'73

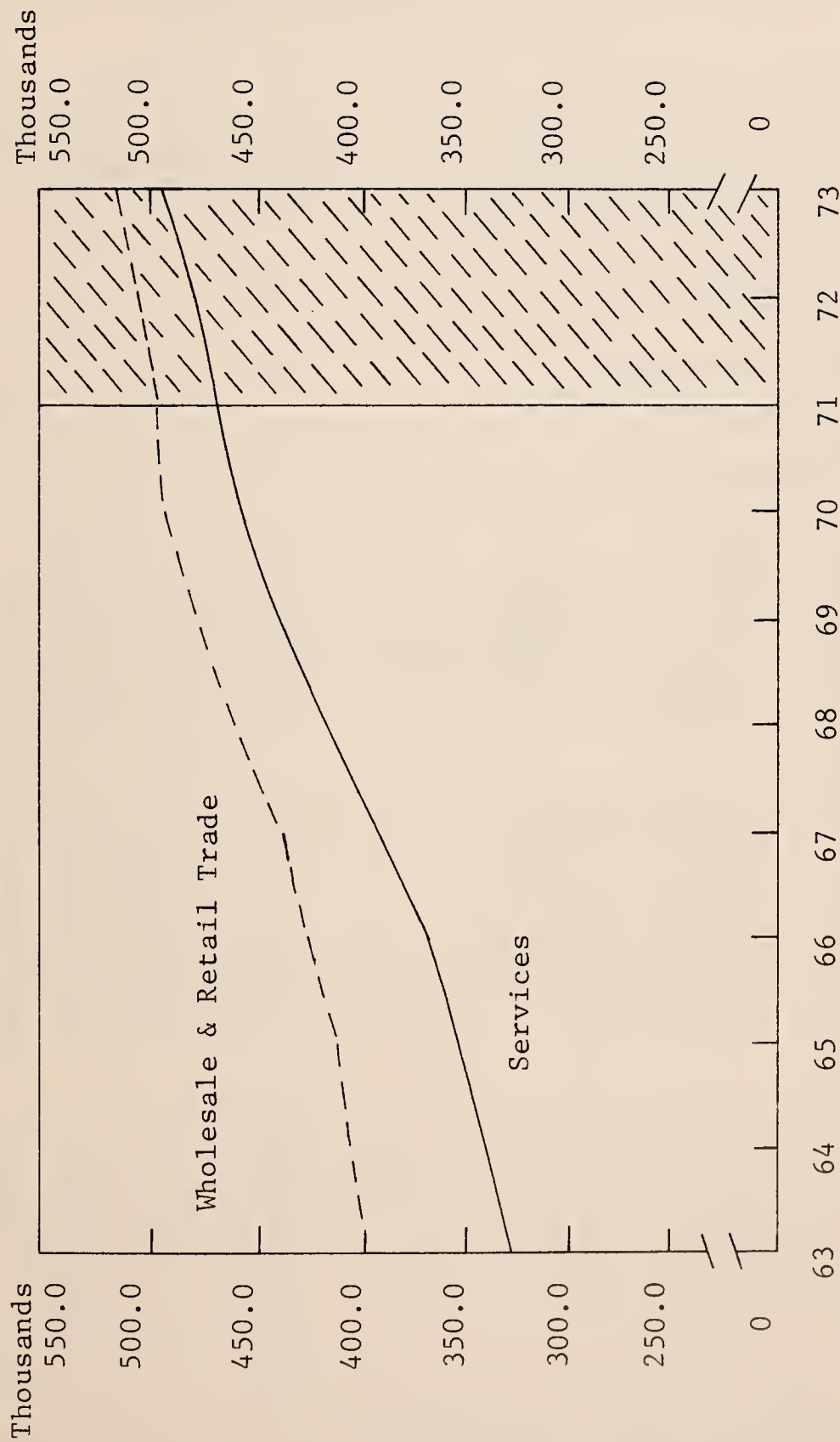


Employment in Printing and Publishing
and the Paper Industries
Fiscal Years '63-'71
Projected to Fiscal Years '72-'73



Source: Annual Manpower Planning Report, 1972, DES.

Employment in Wholesale and Retail Trade and Services
 Fiscal Years '63-'71
 Projected to Fiscal Years '72-'73



Source: Annual Manpower Planning Report, 1972, DES.

PROJECTIONS OF THE WORK FORCE, UNEMPLOYMENT, AND
EMPLOYMENT BY MAJOR INDUSTRY DIVISIONS AND GROUPS
FISCAL YEAR 1971 to FISCAL YEAR 1972

Major Industry Divisions and Groups	Employment*			
	Fiscal Yr. Average 1971	Estimated Change FY 1971 to FY 1972		Fiscal Yr. Average 1972
		Amount	Percent	
THE WORK FORCE	2,632.1	+22.3	+ 0.8	2,654.4
UNEMPLOYMENT	170.1	+14.1	+ 8.3	184.2
THE RATE	6.5	—	—	6.9
TOTAL EMPLOYMENT	2,462.0	+ 8.2	+ 0.3	2,470.2
Nonagricultural Total	2,262.9	+11.6	+ 0.5	2,274.5
Manufacturing Total	621.5	-18.0	- 2.9	603.5
Durable Goods	316.0	-12.1	- 3.8	303.9
Ordnance	18.4	- 2.0	-10.9	16.4
Primary metal industries	18.3	- 1.6	- 8.7	16.7
Fabricated metal products	39.1	- 0.2	- 0.5	38.9
Machinery, except electrical	70.4	- 3.7	- 5.2	66.7
Electrical mach., equip., & supplies ...	88.4	- 3.8	- 4.3	84.6
Transportation equipment	24.0	- 0.5	- 2.1	23.5
Instruments, etc.	31.5	0.0	0.0	31.5
All other durables	25.9	- 0.3	- 1.2	25.6
Nondurable Goods	305.5	- 5.9	- 2.3	299.6
Food & kindred products	36.6	- 0.3	- 0.8	36.3
Textile mill products	29.2	- 0.3	- 1.0	28.9
Apparel & related products	48.0	- 0.2	- 0.4	47.8
Paper & paper products	33.7	- 1.4	- 4.2	32.3
Printing & publishing	43.9	- 0.4	- 0.9	43.5
Chemicals & allied products	19.4	- 0.5	- 2.5	18.9
Rubber & misc. plastics products	34.3	- 0.6	- 1.7	33.7
Leather & leather products	33.6	- 2.5	- 0.7	31.1
All other nondurables	26.8	+ 0.3	+ 1.1	27.1
Nonmanufacturing Total	1,641.4	+29.6	+ 1.8	1,671.0
Contract construction	100.1	+ 4.6	+ 4.6	104.7
Trans., comm., & utilities	117.7	+ 2.8	+ 2.4	120.5
Wholesale & retail trade	498.5	+ 4.8	+ 1.0	503.3
Finance, insurance & real estate	129.2	+ 0.1	+ 0.1	129.3
Services, miscellaneous, & mining	470.4	+ 7.6	+ 1.6	478.0
Government	325.6	+ 9.7	+ 3.0	335.2
Federal	63.2	- 1.4	- 2.2	61.8
State & local	262.3	+11.1	+ 4.2	273.4
Other nonagricultural, and agriculture	199.1	- 3.4	- 1.7	195.7

Sources: Current Employment Series of U.S. Department of Labor, Bureau of Statistics.
Massachusetts Department of Labor and Industries as adjusted to Employment and
Wage data of Massachusetts Division of Employment Security.

*In thousands of jobs

PROJECTIONS OF THE WORK FORCE, UNEMPLOYMENT, AND
EMPLOYMENT BY MAJOR INDUSTRY DIVISIONS AND GROUPS
FISCAL YEAR 1972 to FISCAL YEAR 1973

Major Industry Divisions and Groups	Employment*			
	Fiscal Yr. Average 1972	Estimated Change FY 1972 to FY 1973		Fiscal Yr. Average 1973
		Amount	Percent	
THE WORK FORCE	2,654.4	+63.8	+ 2.4	2,718.2
UNEMPLOYMENT	184.2	- 8.2	- 4.5	176.0
THE RATE	6.9	—	—	6.5
TOTAL EMPLOYMENT	2,470.2	+72.0	+ 2.9	2,542.2
Nonagricultural Total	2,274.5	+67.9	+ 3.0	2,342.4
Manufacturing Total	603.5	+13.4	+ 2.2	616.9
Durable Goods	303.9	+11.3	+ 3.7	315.2
Ordnance	16.4	+ 1.4	+ 8.5	17.8
Primary metal industries	16.7	+0.3	+ 1.8	17.0
Fabricated metal products	38.9	+ 2.7	+ 6.9	41.6
Machinery, except electrical	66.7	+ 1.2	+ 1.8	67.9
Electrical mach., equip., & supplies ...	84.6	+ 1.9	+ 2.2	86.5
Transportation equipment	23.5	+ 2.3	+ 9.8	25.8
Instruments, etc.	31.5	+ 1.3	+ 4.1	32.8
All other durables	25.6	+ 0.2	+ 0.8	25.8
Nondurable Goods	299.6	+ 2.1	+ 0.7	301.7
Food & kindred products	36.3	+ 1.3	+ 3.6	37.6
Textile mill products	28.9	+ 0.1	+ 0.3	29.0
Apparel & related products	47.8	- 0.1	- 0.2	47.7
Paper & paper products	32.3	0.0	0.0	32.3
Printing & publishing	43.5	+ 0.4	+ 0.9	43.9
Chemicals & allied products	18.9	+ 0.4	+ 2.1	19.3
Rubber & misc. plastics products	33.7	+ 0.8	+ 2.4	34.5
Leather & leather products	31.1	- 1.7	- 5.5	29.4
All other nondurables	27.1	+ 0.9	+ 3.3	28.0
Nonmanufacturing Total	1,671.0	+54.5	+ 3.3	1,725.5
Contract construction	104.7	+ 9.4	+ 9.0	114.1
Trans., comm., & utilities	120.5	+ 6.9	+ 5.7	127.4
Wholesale & retail trade	503.3	+ 9.8	+ 1.9	513.1
Finance, insurance & real estate	129.3	+ 2.9	+ 2.2	132.2
Services, miscellaneous, & mining	478.0	+11.2	+ 2.3	489.2
Government	335.2	+14.3	+ 4.3	349.5
Federal	61.8	+ 2.3	+ 3.7	64.1
State & local	273.4	+12.0	+ 4.4	285.4
Other nonagricultural, and agriculture ...	195.7	+ 4.1	+ 2.1	199.8

Sources: Current Employment Series of U. S. Department of Labor, Bureau of Statistics.
Massachusetts Department of Labor and Industries as adjusted to Employment and
Wage data of Massachusetts Division of Employment Security.

*In thousands of jobs

THE ECONOMY AND THE INDIVIDUAL

Personal Income

Personal Income is a comprehensive measure of the state's economic prosperity. From 1960 to 1970, according to the United States Department of Commerce, personal income in the United States increased 100.4 percent. In Massachusetts, according to the same source, the gain was 96.0 percent over the same time span. Massachusetts' population did not expand quite as fast as nationally, so on a per capita basis the Bay State's personal income actually advanced at a faster pace — up 77.4 percent — than that national increase of 76.9 percent. In 1971 The Commonwealth had the tenth highest per capita personal income in the nation, 11 percent higher than the national average. Personal income in the state performed about as well or better than the United States right through the second quarter of last year, according to the Department of Commerce figures. In the following table, personal income, seasonally adjusted, is indexed to show the pattern, using the first quarter of 1969 as a base.

Index of Personal Income, (First Quarter 1969=100)			
Quarter		U.S.	Mass.
1969	I	100.0	100.0
	II	102.2	102.4
	III	104.4	104.8
	IV	106.2	106.3
1970	I	107.9	108.1
	II	110.6	111.0
	III	111.4	112.7
	IV	112.4	115.1
1971	I	114.9	114.7
	II	117.8	117.5
	III	119.4	120.3

Source: Computed from *Survey of Current Business*, August 1971 p. 18.

Projections made for the *Survey of Current Business* show per capita personal income for the state staying at a relative level of 7 percent higher than the nation through 1980 and 1990.

Projections for Massachusetts					
	<u>1950</u>	<u>1959</u>	<u>1969</u>	<u>1980</u>	<u>1990</u>
Population	4,686,000	5,117,000	5,645,000	6,649,000	7,710,000
Percapita Income (1967 \$)	2,254	2,680	3,723	5,111	6,516
Percapita Income-Relative (U.S. = 1.00)	1.09	1.10	1.09	1.07	1.07
Total Personal Income (1967 \$)	10,562,931	13,711,225	21,047,843	33,986,000	50,243,000

Source: *Survey of Current Business* April, 1972, Compiled from page 36.

Wage and Salary Income

Another indication of the relative economic health of the state is wage and salary income, which performed better in Massachusetts than in the United States in 1970. Moreover, this was true of the manufacturing portion, as the following table shows.

Percent Change in Selected Personal Income Items				
	<u>Total Wage and Salary Disbursements</u>		<u>Manufacturing Wages and Salaries</u>	
	<u>1968-1969</u>	<u>1969-1970</u>	<u>1968-1969</u>	<u>1969-1970</u>
United States	9.6	6.2	8.0	0.5
Massachusetts	9.2	7.3	5.7	2.1

Source: Compiled from *Survey of Current Business*, August 1971, pp. 32-33

Hourly Earnings and Average Work-Week

Earnings per hour in Massachusetts has shown an improvement over time with a slight downturn in 1971. This can be a reflection of labor contracts, of a shift of Bay State workers to higher paying industries and perhaps of gains in productivity.

	<u>U.S.</u>	<u>Mass.</u>	<u>Mass. as % of U.S.</u>
1960	\$2.26	\$2.09	92.4%
1965	2.61	2.45	93.9
1969	3.19	3.03	95.0
1970 (thru Oct.)	3.36	3.23	96.1
1970 (annual av.)	3.57	3.42	95.8

Source: Estle, N.E. Telephone Co.

The average work week in Massachusetts has been lower than the United States relative to the level in 1969 for manufacturing production workers.

	<u>United States</u>		<u>Massachusetts</u>	
	Hours	1969=100	Hours	1969=100
1969	40.6	100.0	39.7	100.0
1970	39.8	98.0	39.2	98.7
1971 (thru Oct.)	39.8	98.0	39.2	98.7
1971 (annual av.)	39.9	98.3	39.4	99.2

Source: Compiled by Edwin Estle of N.E. Telephone Co.

Real Money and Cost of Living

While the average annual wage in the state increased nearly 57 percent from 1960 to 1970, taking into account inflation and using 1967 dollars as an index, it increased about 20 percent.

	Average Annual Wages		Average Weekly Wages	
	Current Dollars	1967 Dollars	Current Dollars	1967 Dollars
1958	\$4,190	\$4,838	\$81	\$93
1959	4,409	5,050	85	97
1960	4,547	5,126	87	99
1961	4,680	5,223	90	100
1962	4,883	5,390	94	104
1963	5,028	5,483	97	105
1964	5,271	5,674	101	109
1965	5,449	5,766	105	111
1966	5,693	5,857	109	113
1967	5,940	5,940	114	114
1968	6,296	6,042	121	116
1969	6,718	6,118	129	118
1970	7,156	6,153	138	118

Source: *Employment and Wages in Massachusetts*, DES. 1970

The Boston Consumer Price Index rose 3.2 percent in the first three quarters of 1971 compared to a 4.6 percent increase in the same months of 1970 and a 5.3 percent rise in 1969. The rate of price increase has slackened over the past two years but is still nearly 42 percent higher than in 1960.

From October 1970 to October 1971, Boston retail prices recorded a substantially larger increase — 4.4 percent as compared with 3.8 percent for the United States as a whole.

During the same period, Boston housing costs increased nearly 7 percent as compared to less than 4 percent in the average for all cities. For example, rents in Boston rose 5.7 percent during the year's time compared to 4.5 percent for the nation. Similarly, the costs of home ownership here rose faster than the average for all U.S. cities.

The Boston area price advance for the gas and electricity group rose by 11.3 percent in 12 months compared to a 6.3 percent rise for the nation as a whole.

Clothing prices were less volatile, increasing by 2.5 percent in Boston compared to 2.9 percent for the nation. Food prices in the Boston area rose 2.0 percent from October to October, compared to 2.9 percent for the nation as a whole.

Over a longer term, price behavior in Boston and the United States has been characterized by moderate price rises in peace time and sharp advances in war-related years. Since 1960, the Boston Consumer Price Index has risen by 42 percent as retail prices paid by the urban worker mounted steadily year after year. The last year in which there was a

recorded decrease in the Boston CPI was 1949. Since 1960, food prices have risen 39 percent and housing costs by 44 percent, among the largest advances of the major commodity groups.

Over the first three quarters of 1971, the gross average weekly earning of Boston area factory production workers rose from \$144.26 to \$148.55. Net spendable earnings, after deductions for Federal income taxes and Social Security for the same worker with 3 dependents, rose from \$125.08 to \$128.46 or 2.7 percent. However, when these net earnings were adjusted for the retail price increase, the purchasing power of the average production worker in Greater Boston had declined by 0.5 percent from \$103.64 to \$103.10 by October 1971. The year (1970) in a similar 9-month period, saw these real spendable earnings rise by 0.4 percent.

While the Boston CPI does not entirely represent price movements in the state, it does give an indication of recent trends and how these compare to national trends.

<u>Consumer Price Indices</u>		<u>1967=100</u>	
	<u>National City Average</u>		<u>Boston SMSA</u>
1950	72.1		69.5
1955	80.2		76.6
1960	88.7		86.5
1963	91.7		91.4
1964	92.9		92.7
1965	94.5		94.5
1966	97.2		97.7
1968	104.2		104.1
1969 all items	109.8		110.0
food		108.9	108.3
1970 all items	116.3		116.5
food		114.9	114.9
housing		118.9	118.8
apparel and upkeep		116.1	117.5
medical care		120.6	124.4
transportation		112.7	112.2

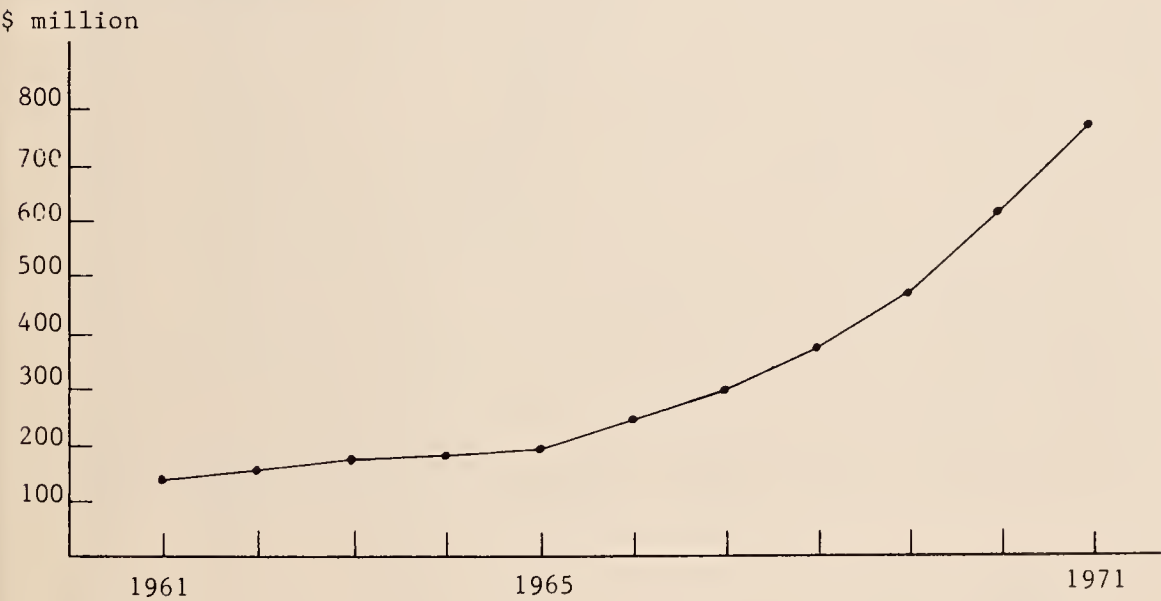
From about 1950 to 1965 the Boston CPI was lower than the city average, but it has since increased and is slowly surpassing the national city average.

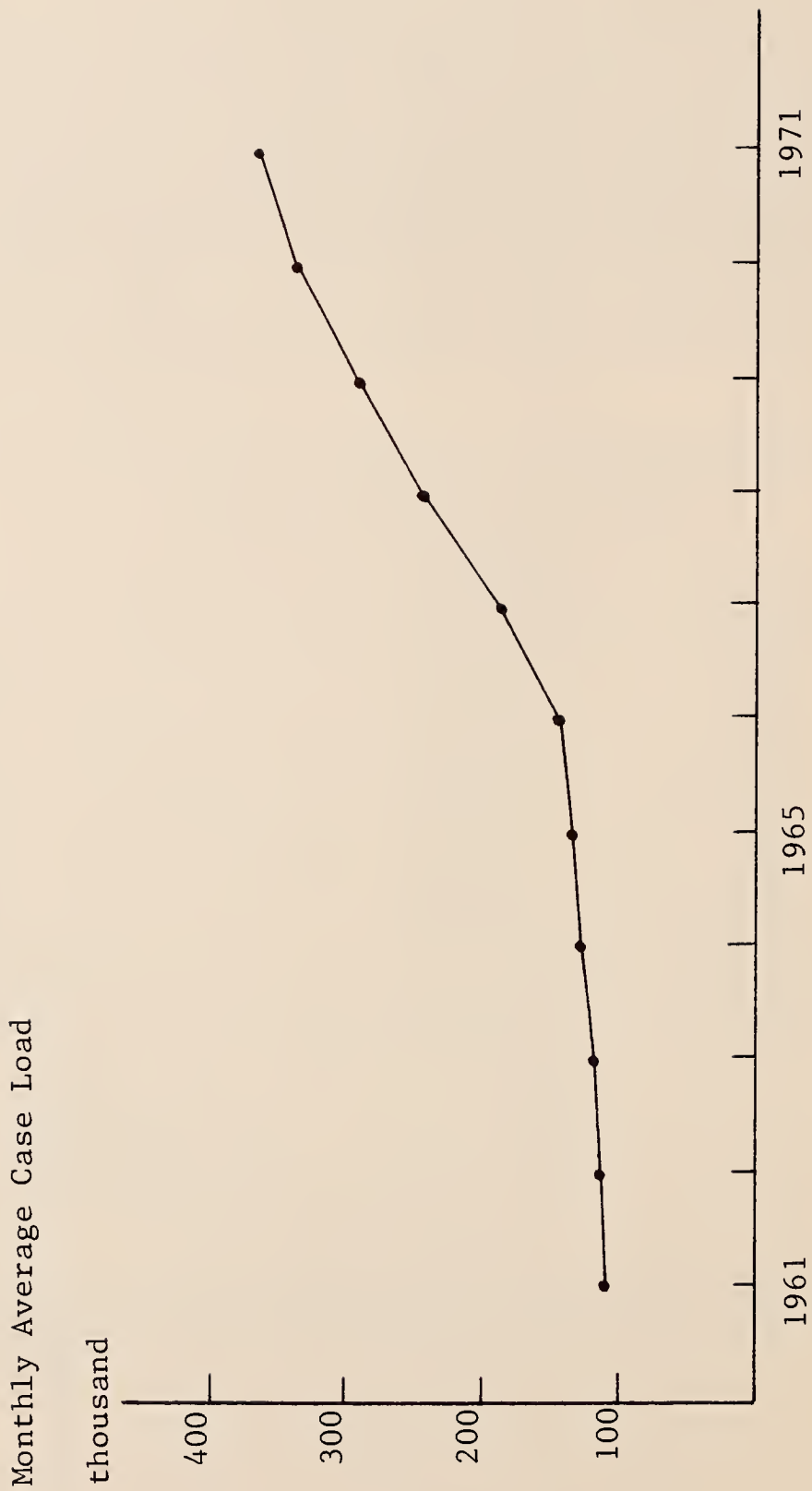
Public Assistance and Welfare

The 1960-1970 U.S. average per capita expenditure on public welfare was \$72.24. For the same period, Massachusetts spent \$132.86. These high welfare costs are a function of the relative number of cases, and the flexibility of a state with respect to welfare eligibility and benefits.

The figures for 1971 show a 27% increase over 1970 public assistance payments. The Federal government contributed 45% of the total \$724 million welfare burden, leaving over \$396 million as the Commonwealth's share. Seven percent of total public assistance costs are for administrative expenses for public assistance. Of the total \$54 million, the state paid about \$29 million.

Public Assistance Payments





Source: Annual Statistical Report-Fiscal Year 1971, Public Welfare Department.

The ten years from 1961 to 1971 show a 300 percent increase in public assistance payments. There has also been a definite upswing in the monthly average case load. A significant portion of this increase is due to the assumption of the Medicaid program in September 1966, and the transfer of welfare administration from the cities and towns to the State Government in July 1968.

Public Manpower Services

Public assistance is measured not only by the number of those in need who are helped financially by the state, but by those who can work and are assisted in finding employment. The Manpower Administration of the U.S. Department of Labor defines what is called a "universe of need for manpower services" as representing an estimate of the total number of different individuals, both unemployed and underutilized (underemployed), who may need some form of employment-related assistance at any time during the year for which the estimate is being prepared. It is estimated that approximately 986,900 persons in Massachusetts will be in the universe of need for Fiscal Year 1973. Of this total, slightly more than half (52 percent, or 513,400 individuals) will be those whose incomes are above the near-poverty level. An additional 200,700 persons (20 percent of the total) fall into the category of those who are in near-poverty. The remaining 272,800 individuals in the universe of need are the poor, including 226,100 disadvantaged persons and 46,700 "other" (nondisadvantaged) poor.

The predicted figure of 226,100 disadvantaged who will need employment assistance during 1973 is a composite of 28,900 unemployed, 14,300 persons employed part time for economic reasons, 144,100 employed full time but whose incomes are below poverty level, and 38,800 who are not in the labor force but who should be because of the particular age-sex-race classification to which they belong. Public assistance recipients (all of whom are considered poor) should make up about 5 percent of the total universe of need for 1973.

PUBLIC ASSISTANCE

PUBLIC ASSISTANCE PAYMENTS, AVERAGE MONTHLY PAYMENTS, AND AVERAGE MONTHLY CASELOAD

FISCAL YEARS ENDING JUNE 30, 1970 AND 1971

Programs	1971	1970
	<u>Payments*</u>	
All Programs	\$724 234 115	\$563 952 574
Old Age Assistance	85 315 207	76 986 610
Medical Assistance	304 840 298	252 931 893
Aid to Families with Dep. Children	245 096 301	172 765 693
Disability Assistance	32 360 222	25 190 231
General Relief	56 622 087	36 078 147
	<u>Average Monthly Payment</u>	
Old Age Assistance	\$120.51	\$115.91
Medical Assistance	108.93	91.83
Aid to Families with Dep. Children	287.61	252.88
Disability Assistance	142.30	125.81
General Relief	160.37	152.44
	<u>Average Monthly Caseload</u>	
Old Age Assistance	58 994	55 347
Medical Assistance	233 208	229 526
Aid to Families with Dep. Children	71 016	56 932
Disability Assistance	18 951	16 685
General Relief	29 423	19 722

*Do not include Contract Day Care, DES Payments, Emergency Assistance Payments, and Other Adjustments.

Source: *Annual Statistical Report - Fiscal Year 1971*, Dept. of Public Welfare.

PUBLIC ASSISTANCE
PAYMENTS TO OR FOR PUBLIC ASSISTANCE RECIPIENTS BY PROGRAM
FISCAL YEARS 1961-1971

Fiscal Year	All Programs	Old Age Assistance	Medical Assistance for the Aged	Medical Assistance	Aid to Families with Dep. Children	Disability Assistance	General Relief
1961	\$152 918 206	\$76 182 368	\$23 270 022	\$ —	\$28 542 287	\$16 024 821	\$ 8 898 728
1962	162 550 912	62 254 310	41 780 116	—	34 829 807	16 010 193	7 676 486
1963	170 475 924	59 426 102	46 383 306	—	39 777 175	16 982 825	7 906 516
1964	185 924 089	59 049 737	50 105 913	—	47 584 601	18 810 171	10 373 667
1965	202 312 310	57 962 109	58 394 652	—	54 234 714	22 099 452	9 621 383
1966	222 342 038	57 478 058	69 429 256	—	60 902 016	25 326 567	9 206 141
1967	258 681 901	50 061 575	—	112 691 656*	69 409 350	16 092 280	10 427 040
1968	358 817 331	47 636 549	—	189 918 779	91 674 748	15 850 142	13 737 113
1969	452 498 633	56 406 818	—	226 921 568	128 096 621	19 698 396	21 375 230
1970	563 952 574	76 986 610	—	252 931 893	172 765 693	25 190 231	36 078 147
1971	724 234 115	85 315 207	—	304 840 298	245 096 301	32 360 222	56 622 087

*Includes \$12 305 802 for two months of payments for Medical Assistance for the Aged.
Source: *Annual Statistical Report-Fiscal Year 1971*, Department of Public Welfare

PUBLIC ASSISTANCE
MONTHLY AVERAGE CASELOAD OF PUBLIC ASSISTANCE RECIPIENTS
BY PROGRAM

FISCAL YEARS 1961-1971

Fiscal Year	All Programs	Old Age Assistance	Medical Assistance For the Aged	Medical Assistance	Aid to Families with Dep. Children	Disability Assistance	General Relief
1961	116 433	68 753	13 643	—	14 936	10 301	8 800
1962	113 909	60 641	17 910	—	17 765	9 919	7 674
1963	115 301	56 931	20 946	—	19 434	10 273	7 717
1964	119 463	54 214	23 705	—	21 935	10 819	8 790
1965	124 546	51 921	27 064	—	24 491	12 268	8 802
1966	128 038	49 490	29 971	—	26 693	13 304	8 580
1967	240 032	49 583	30 627*	108 346**	29 725	13 299	8 452
1968	314 470	48 855	—	203 954	36 974	14 211	10 476
1969	362 263	50 481	—	237 263	45 857	15 391	13 271
1970	378 212	55 347	—	229 526	56 932	16 685	19 722
1971	411 592	58 994	—	233 208	71 016	18 951	29 423

*Two Month Average

**Ten Month Average

Source: *Annual Statistical Report-Fiscal Year 1971*, Department of Public Welfare

AVERAGE WEEKLY EARNINGS IN EMPLOYMENT
SUBJECT TO THE MASSACHUSETTS EMPLOYMENT SECURITY LAW

MASSACHUSETTS AND THE STANDARD METROPOLITAN STATISTICAL AREAS
BY MAJOR INDUSTRY DIVISIONS

1970
(IN CURRENT DOLLARS)

INDUSTRY DIVISION	AREA										
	Massachusetts	Boston	Brockton	Fall River	Fitchburg-Leominster	Lawrence-Haverhill	Lowell	New Bedford	Pittsfield	Springfield-Chicopee-Holyoke	Worcester
All industries	\$138	\$146	\$120	\$105	\$130	\$130	\$128	\$112	\$151	\$129	\$136
Manufacturing	152	166	128	103	149	145	145	117	183	147	153
Contract construction	191	203	178	154	178	163	158	151	189	191	194
Transportation, communication and utilities	163	168	154	162	142	143	138	152	151	156	172
Wholesale and retail trade	109	117	96	94	91	96	95	92	95	98	104
Finance, insurance and real estate	148	154	127	102	138	128	132	117	138	134	138
Services, miscellaneous and mining	145	132	91	71	85	98	113	94	77	91	92

Source: *Employment and Wages in Massachusetts, 1958-1970*, (Employment and Wage Bulletin #3) Division of Employment Security.

PUBLIC ASSISTANCE

FEDERAL AND STATE PARTICIPATION IN ASSISTANCE PAYMENTS FOR ALL PROGRAMS

FISCAL YEAR ENDING JUNE 30, 1971

Shares by Program	Amount	Percent
<u>All Programs — Total</u>	\$724 234 115	100.0
Federal	327 506 914	45.2
State	396 720 684	54.8
Local*	6 517	**
<u>Old Age Assistance — Total</u>	85 315 207	100.0
Federal	41 755 218	48.9
State	43 559 989	51.1
<u>Medical Assistance — Total</u>	304 840 298	100.0
Federal	152 244 461	49.9
State	152 591 097	50.1
Local*	4 740	**
<u>Aid to Families with Dep. Children — Total</u>	245 096 301	100.0
Federal	117 665 121	48.0
State	127 431 180	52.0
<u>Disability Assistance — Total</u>	32 360 222	100.0
Federal	15 842 114	49.0
State	16 518 108	51.0
<u>General Relief — Total</u>	56 622 087	100.0
Federal	0	—
State	56 620 310	100.0
Local*	1 777	**

*Represents local share of obligations incurred before July 1, 1968

**Less than .1 percent

Source: *Annual Statistical Report-Fiscal Year 1971*, Department of Public Welfare.

PUBLIC ASSISTANCE
FEDERAL AND STATE PARTICIPATION IN ASSISTANCE PAYMENTS
AND
ADMINISTRATIVE EXPENSES COMBINED
CLASSIFIED BY SOURCE OF FUNDS
FISCAL YEAR ENDING JUNE 30, 1971

Program	TOTAL		FEDERAL		STATE		LOCAL*	
	AMOUNT	Percent	AMOUNT	Percent	AMOUNT	Percent	Amount	Percent
ALL PROGRAMS	\$778 097 479	100.0	\$352 604 589	45.3	\$425 486 373	54.7	6 517	**
OAA	91 314 014	100.0	44 754 622	49.0	46 559 392	51.0	—	—
MA	317 086 612	100.0	158 367 618	49.9	158 714 254	50.1	4 740	**
AFDC	273 566 954	100.0	132 689 962	48.5	140 876 992	51.5	—	—
DA	34 260 767	100.0	16 792 387	49.0	17 468 380	51.0	—	—
GR	61 869 132	100.0	—	—	61 867 355	100.0	1 777	**

*Represents local share of obligations incurred before July 1, 1968

**Less than .01 percent

Source: Annual Statistical Report-Fiscal Year 1971, Department of Public Welfare.

MANUFACTURING

Manufacturing, and in particular the nondurable goods sector, has been identified as the major cause of the net decline in employment. This decline in the manufacturing base of the Massachusetts economy merits special attention and concern. Annual average employment in manufacturing in 1969 was 682,600. By 1971 the average had dropped to 604,300. Job rolls in the nondurable goods division have been gradually declining over the past two decades, mainly due to competition from abroad and from other states with lower production costs. The durable goods sector showed sharp ups and downs, rising to peaks in 1953 in the Korean conflict, in the early 1960's in the space push, and in the years following the Vietnam escalation. Cutbacks in federal defense and space contracts in the fall of 1969 accelerated the decline which commenced in mid 1967.

As the following table shows, value-added by manufacturing in the state has increased, but at a slower rate than in the nation as a whole.

VALUE ADDED BY MANUFACTURING

			Percent Increases	
	U.S. (mill. \$)	Mass.		U.S. Mass.
1963	192,102	6,404	1963-1968	48.4% 41.4%
1966	250,846	8,378		3.6
1967	261,984	8,715	1966-1967	
1968	285,293	9,056	1967-1968	8.8 3.9
				3.8

Source: *Annual Survey of Manufacturing - 1968*, U.S. Dept. of Commerce, Bureau of Labor Statistics.

From FORTUNE'S 1971 list of major companies, 8 of the 500 largest industrial companies are located in Massachusetts, showing no change from 1969 to 1970 but a drop from 5 in 1961. However, 22 of the second 500 largest industrial companies have headquarters in the state. Two of the 50 largest commercial banking companies, 3 of the 50 largest retailing companies, one of the 50 largest transportation companies, and one of the 50 largest utilities are located in Massachusetts. Boston houses 2 of the 50 largest life insurance companies and Worcester houses one.

Defense and space spending during the 1960's and the "glamour" aspects of R&D masked several trends which were developing during that period. These trends have now emerged with full impact in the face of reduced government R&D spending.

During the 1960's:

- Massachusetts was the 10th ranking industrial state.
- Massachusetts manufacturing industries accounted for 46 percent of payroll and 1/3 of the work force.
- Massachusetts ranked last in percentage increase in manufacturing employment among the 14 leading industrial states.

- Massachusetts ranked last in percentage growth in manufacturing value-added among the 14 leading industrial states.
- Massachusetts ranked 50th in percentage growth in non-agricultural employment.
- Massachusetts ranked last among the New England states in percentage growth of the manufacturing share of gross state product.

While this decline is being partially compensated for by increase in the service or supporting industries, too great a trend in this direction can have important consequences for the future growth of Massachusetts. An economy too heavily dependent on service industries is fragile. Service industries regarded as an industrial job-loss replacement source are often described as lower wage payers more transient and limited in export potential in comparison with manufacturing and, as such, should not be too heavily weighed from an economic base standpoint.

To insure growth, even to stay abreast of other states in the region and the nation, we must develop a desirable mix of manufacturing and service industries. The current mix, and particularly its trends, does not put Massachusetts on a path toward such economic growth.

In addition, past experience shows Massachusetts spending relatively little on industrial development.

ESTIMATED ANNUAL EXPENDITURES ON INDUSTRIAL DEVELOPMENT FOR SELECTED STATES

1968

New England	Expenditures Per Capita	Per Capita Income
Massachusetts	\$.26	\$3,835
Connecticut	.20	4,256
Rhode Island	.37	3,549
Maine	.53	2,824
New Hampshire	.54	3,259
Vermont	1.84	3,072
Other States		
Alaska	2.37	4,146
North Carolina	2.28	2,664
Delaware	.74	3,795
New York	.36	4,151
Florida	.33	3,191

Source: Massachusetts Department of Commerce and Development and Arthur D. Little, Inc.

The trends of the 1960's in Massachusetts indicate that we are losing ground, that we are failing to grasp and hold opportunities to maintain leadership in areas where we have prevailed in the past.

The extent of our employment problem can be traced in large measure to our unfavorable industry mix in the state. There are estimated to be a total of approximately 700,000 workers who are either unemployed or underemployed in lagging industries and who will need to be assimilated over the next 10 years into economically viable sectors of our economy. It has been estimated that The Commonwealth's growth industries are currently able to provide for approximately 10,000 new jobs each year. Without including new job market entrants, it is clear that we must take positive steps to increase the output of existing firms, attract others and start new firms or face even higher unemployment.

Other indicators are more optimistic about the future of the state. One indication is that the state's manufacturing employment has declined, but so has it in most other states. There were 39 states other than Massachusetts which showed an employment decline in manufacturing between 1969 and 1970. Massachusetts was also one of the 38 states that showed a gain in total nonagricultural employment over the same period.

In recent years the U.S. economy's employment growth has been primarily in nonmanufacturing and it is likely to continue on that path.

Encouragement of business growth in all sectors is needed at this time, not just concentration on manufacturing groups. Every effort should be made to retain present manufacturing activity which the state now has, and to encourage its growth where possible; but such efforts should also be directed at a much broader spectrum for business development.

BUSINESS ENVIRONMENT

A most significant factor in the current economic position of The Commonwealth is the polarization existing between business and state government.

Many business and financial leaders feel that the decline of some industries is being accelerated by the emergence of an uncertain industrial climate. The current fiscal situation in Massachusetts is having an unfavorable impact on the business environment. Rapidly rising property, corporate and income taxes needed to finance rapidly expanding welfare and unemployment spending are placing many of The Commonwealth's efficient industries at a competitive disadvantage. Some marginal producers who still provide jobs, are finding it more difficult to stay in business.

Taxes, wage rates, fuel costs, and more recently, ecological regulations each are not crippling in and of themselves. Compounded, they add up to a high cost of doing business in Massachusetts. As a result, many companies are looking for more favorable environments. Of equal concern are the companies we need to attract to project our potential growth and who will never appear because of our high cost business environment.

A Comparative Study of State and Local Taxes, January 1972, was prepared in conjunction with the activities of the Boston Area Business Development Council. It states that Massachusetts is in competition to a great extent with other industrial states which seek every locational advantage in searching for new or expanding industries. Taxes on corporations and their employees is a consideration that does not favor Massachusetts or its surrounding area. Taxes on property and income account for approximately 58 percent of the total state and local revenues for the 10 states selected for this study. The pattern of state tax burden on 5 selected situations for various sized company operations and for selected personal income levels, showed that Massachusetts ranked second highest in 3 of the 5 corporate levels of size, and shaded the high side on the other 2 comparative examples. The individual's tax burden for 5 levels of income placed Massachusetts as the highest in 4 of the categories ranging from \$10,000 to \$50,000 annual earnings and second highest in the other.

The pattern of the tax burden by state resulting from the study can be seen in the following summary. (The corporation categories from A to E were 4 manufacturing companies and one service company. The financial characteristics of each, such as investment in inventory, investment in fixed assets, and net income before Federal and state taxes, varied significantly. The companies ranged from a small closely-held company to a large publicly-traded company. The individual categories A to E were based on the following characteristics: 1) Gross income at \$10,000 intervals from \$10,000 to \$50,000 per year, 2) Married couple with 2 children. 3) Owns home valued at twice annual gross income. The states are ranked from 1, highest tax burden, to 10, lowest tax burden.)

State	<u>Corporation</u>					<u>Individual</u>				
	A	B	C	D	E	A	B	C	D	E
Massachusetts	2	2	2	5	4	1	1	1	1	2
California	5	4	4	4	3	7	6	5	4	4
Connecticut	3	2	3	2	2	8	9	9	9	9
Georgia	6	5	5	7	5	9	7	7	7	7
Illinois	1	1	1	1	1	2	4	4	5	5
Maryland	9	8	9	3	9	4	3	3	3	3
New Jersey	4	7	6	8	8	3	5	6	6	6
New York	7	9	10	9	10	5	2	2	2	1
Pennsylvania	8	6	7	6	7	6	8	8	8	8
Texas	10	10	8	10	6	10	10	10	10	10

In Massachusetts, the tax burden is high for both corporations and individuals leaving little opportunity for shifting the burden.

The property tax is the single most important burden affecting a business location and individuals. Massachusetts ranks second highest in the nation in state and local property taxes per capita. The Master Tax Plan Commission recommended that Massachusetts realign its sources of state and local tax revenue so as to limit the dependence on the property tax as a source of revenue. Other states studied place greater reliance on income and sales taxes as a source of revenues, such taxes being more closely related to productivity. The recommendations of the Master Tax Plan Commission have not as yet been issued. Studies by the Commission confirm that the deficiencies in the tax structure exist in Massachusetts. Directly involved in locational decisions is the desire for services which the tax dollars provide. In such instances, Massachusetts could be evaluated as desirable or undesirable based on corporate responsibility inclinations. It is difficult to accurately assess the overall effectiveness or level of services provided in return for tax dollars. While not directly representative of services provided for business by the state, the following table compares per capita expenditures for various types of services for 10 states. Massachusetts provides a relatively high level of total services, but a very large percentage has gone to public welfare assistance.

An important factor in the industrial decision of location and expansion is sources and level of state and local revenues and resulting taxes. Unless drastic action is taken, state and local revenue needs will continue to expand all governments will be faced with the task of finding new revenue sources and/or expanding existing sources.

The Massachusetts Taxpayers Foundation in testimony before the House Committee on Ways and Means, stated that state taxes and spending are increasing at a greater rate than has the economy which must produce the revenue.

A report prepared for the Master Tax Plan Commission by Dr. Ann F. Friedlaender in 1970 described the state of the economy, assessed its prospects for growth during the next 10 years, and estimated the revenues which the existing Massachusetts tax structure could be expected to produce under probably hypotheses of economic growth.

On the basis of statistical relationships between past revenues and personal income and between total personal income and personal income of the export sector, future yields of the present Massachusetts revenue structure and its most important components have been projected according to different estimates of the growth of personal income and the relative size of the export sector. The study shows that the Massachusetts tax structure seems quite responsive to the growth of personal income. Assuming that the Massachusetts economy continues to grow at a moderate rate, total revenues were projected to a level of \$5 billion by 1980. Even if the economy were to remain relatively stagnant, the 1980 projection is for a total revenue of \$4.6 billion; on the most optimistic estimate regarding economic growth, on the other hand, a yield of as much as \$6 billion is projected.

COMPARATIVE STUDY OF STATE AND LOCAL TAXES

SELECTED ITEMS OF STATE AND LOCAL GOVERNMENT

FINANCES PER CAPITA 1969-70

General Expenditures

State	Rank	Total	Education		Highways	Public Welfare	Health and Hospitals	Police and Fire	Financial Administration	Other (1)
			Higher Education	Other Education						
New York	1	\$919.35	\$50.75	\$234.94	\$70.21	\$134.80	\$96.78	\$58.44	\$11.87	\$241.56
California	2	841.08	73.87	212.36	81.12	148.41	54.73	47.10	14.99	208.50
Massachusetts .	3	688.04	37.56	176.82	72.30	132.86	52.32	44.74	10.76	160.68
Connecticut	4	678.37	38.59	218.64	78.00	68.10	40.93	36.52	14.10	183.49
Maryland	5	671.99	54.70	231.77	69.54	54.33	53.29	40.74	12.32	155.30
New Jersey	6	604.01	38.57	198.27	81.36	52.95	38.40	40.35	9.57	144.54
Illinois	7	602.55	67.39	191.32	64.05	57.50	39.82	36.35	8.57	137.55
Pennsylvania ...	8	597.27	32.89	208.96	86.61	69.36	34.21	25.51	8.84	130.89
Georgia	9	547.00	58.26	169.16	62.51	54.82	63.43	18.97	7.57	112.28
Texas	10	502.99	57.44	160.87	79.48	47.56	33.76	23.55	7.30	93.03
U.S. Average ..		646.31	63.60	195.83	80.84	72.24	47.57	32.06	9.98	144.19

(1) Other expenditures include sewerage and sanitation, parks and recreation interest on general debt and all other general expenditures.
Source: U.S. Department of Commerce, Bureau of the Census, Governmental Finances in 1969-70, Table 22.

As these projections show, the relationship of total state and local tax revenues to personal income is a measure of the extent to which tax resources have been used or are available. The following chart shows a comparison of such a statistic.

<u>State</u>	<u>Rank</u>	State and Local Tax Collections as a Percentage of Personal Income — <u>1969</u>	Personal Income Per Capita — <u>1969</u>	Percentage Increase in Personal Income Per Capita <u>1959-1969</u>
New York	1	13.0%	\$4,442	66.9%
California	2	12.6	4,290	61.8
Massachusetts	3	10.9	4,156	75.1
Maryland	4	10.1	4,073	79.5
New Jersey	5	9.6	4,241	61.0
Pennsylvania	6	9.3	3,659	66.6
Georgia	7	8.8	3,071	90.0
Illinois	8	8.7	4,285	66.0
Connecticut	9	8.5	4,595	70.5
Texas	9	8.5	3,259	70.4
U.S. Average		10.3	3,687	70.6

Source: *A Comparative Study of State and Local Taxes*

Another source of financing state and local needs outside of the tax structure is borrowing. An indication of future borrowing ability is the level of per capita state and local debt.

<u>State</u>	<u>Rank</u>	<u>Per Capita Long Term Debt of State and Local Governments Outstanding at End of Fiscal Year 1970</u>
New York	1	\$1,055.46
Connecticut	2	863.67
Maryland	3	828.80
California	4	776.46
Pennsylvania	5	730.14
Massachusetts	6	644.00
Texas	7	617.62
New Jersey	8	606.75
Illinois	9	530.02
Georgia	10	543.65
U.S. Average		646.62

Source: *A Comparative Study of State and Local Taxes*.

While the deficiencies noted in the Massachusetts taxing structure are problems in many other states, Massachusetts has an opportunity to assume a leadership role among the competitive industrial states by recognizing these deficiencies and by taking positive steps to correct the inequities to the benefit of economic development.

It can be concluded from the above evidence, that comprehensive tax reform should be implemented as a long-run goal to relieve inequities and the excessive dependency on property tax. A more immediate solution could be an expanded program of selective incentives keyed to increasing employment.

Our government process in Massachusetts has been openly criticized as dividing the two essential economic partners, the owners and managers of capital and those who possess the skills to do the work, thereby driving a wedge through the heart of the industrial partnership. Whether the above is true to a greater or lesser degree is insignificant beside the fact that many in the state feel that a trichotomy is emerging between business, labor and state government.

It is important that confidence in state government be maintained by the leaders of the business and financial communities — confidence that state government is understanding of, sympathetic to, and interested in the acute economic and industrial problems facing us in Massachusetts — confidence which will attract new industries and businesses.

COMPARATIVE STUDY OF STATE AND LOCAL TAXES

SOURCE OF REVENUES — 1970 (in Millions)

State	Total		Property Tax		Corporation Income Tax		Individual Income Tax		Sales and Use Tax (2)		Other Taxes (3)	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Massachusetts . .	\$ 2,828	100%	\$ 1,423	50%	218	8%	\$ 518	18%	\$ 168	6%	\$ 501	18%
California	11,161	100	5,231	47	588	5	1,151	10	1,757	16	2,434	22
Connecticut	1,471	100	723	50	120	8	5	—	259	18	364	24
Georgia	1,432	100	437	30	85	6	185	13	336	23	389	28
Illinois	5,410	100	2,229	42	141	2	576	11	1,008	19	1,456	26
Maryland	1,890	100	613	32	60	3	413	22	237	12	567	31
New Jersey	3,207	100	1,734	54	169	5	18	1	356	11	930	29
New York	11,898	100	4,328	37	693	6	2,506	21	1,012	8	3,359	28
Pennsylvania ...	4,734	100	1,399	30	530	11	—(1)	—	948	20	1,857	39
Texas	3,541	100	1,435	41	—	—	—	—	553	16	1,553	43
Totals	\$47,572	100%	\$19,552	41%	\$2,604	6%	\$5,372	11%	\$6,634	14%	\$13,410	28%

(1) Personal income tax effective June 1, 1971.

(2) Exclusive of local sales and use taxes.

(3) Other taxes include local income and sales taxes and special gross receipts taxes such as the tax on cigarettes, alcohol and gasoline

Source: *A Comparative Study of State and Local Taxes*, Arthur Anderson & Co. January 1972.

TECHNOLOGY

Technology and technology-based organizations, both industrial and educational, have provided much of the impetus and underpinning to the economy of Massachusetts for well over a hundred years. In recent years, electronics, instruments, guidance and control, and space have been in the forefront. In the past, shoes, textiles, watches, and shipbuilding were the high technology industries of their day.

Knowledge industries, at the leading edge of technology, have provided economic stimulus in themselves and to the many supporting industries which have served them.

The severe cutbacks in government defense and space contracts since the 1967-68 peak have had a serious effect on the economy of Massachusetts. R&D subcontractors have been especially hard hit across the nation, since they are the first to be reduced and the last to be paid in a roll-back. Massachusetts technology companies, many of them small, have served predominantly as subcontractors with the result that this state has been particularly hard hit economically, even though prime contract awards have fallen approximately with the national average.

A unique situation has been created wherein many companies who have worked only on defense or space projects must now find other customers. Available federal funds for new emerging technological areas such as environmental and pollution control, transportation, and medical electronics have been very small. They have not represented more than a fraction of defense and space funds already eliminated from past and current budgets.

The peak number of unemployed professional scientists and engineers in Massachusetts, approximately 10,000, called attention to the acute technology cutbacks. But, for every professional who became disemployed, approximately 4 to 10 other workers also lost their jobs, workers who were supported by the technical professionals' efforts.

An important question here is just what has been, and will be the magnitude and impact of defense cutbacks.

The single most important factor underlying the ease or severity of the overall adjustment from a wartime to peacetime economy is the state of the economy or the phase of the business cycle in which the nation is operating at the time defense spending is cut back. A study assaying the impact of de-escalation on the economy carried out in late 1968 (when the economy was operating at near maximum employment) concluded, in part:

If the war should end under these conditions, the transition from a wartime to a peacetime economy would certainly be eased. But, if the end should come later and unhappily coincide with a receding economy with relatively high unemployment, the impact of a cutback as assumed by the Council of Economic Advisors, of \$15 billion (1967 prices) in defense spending could be severe and would require strong counter-recessionary measures.

Source: Post Vietnam Planning Committee's Report to Governor Nelson A. Rockefeller, *Plans for New York State to Meet the Economic Consequences of Peace*, 1968, p. 21.

A study prepared for the Department of Commerce and Development by Arthur D. Little states that in recent years only 6 to 8 states received more dollar volume of prime defense contracts than Massachusetts. About 130,000 people had defense jobs in Massachusetts in 1969. About 5.3 percent of total Massachusetts employment and 15 percent of total manufacturing jobs were defense related in 1969. At the same time, however, Massachusetts is not heavily reliant on spending related to the Vietnam war. Instead, much is either of the research and development type or related to the production of sophisticated, high-technology equipment and components needed in strategic weapons and space systems.

Thus the greatest part of anticipated job losses is related not to cutbacks in defense spending for Vietnam, but to:

- (a) The stretch-out of military programs not associated with Vietnam.
- (b) Decreases in spending for strategic weapons systems, accentuated by a potential reordering of priorities between defense and non-defense government spending.
- (c) An "economy drive" by a federal government concerned with problems of inflation and rising prices.
- (d) The general economic slowdown which has significantly lessened the ability and willingness of commercial markets and activities to take up the slack in employment caused by defense cutbacks.

Over the transitional period, 1970-1972, an estimated 25,000 jobs have been lost in defense-related industries of Massachusetts due to declining defense spending, and up to 5,000 jobs have been and could be lost by civilian employees on military installations.

To the extent individuals who are laid off do not find alternative employment and decrease their spending, unemployment is likely to continue spreading to the nondefense industry sectors. Such an indirect impact of declining defense spending has led and could lead to an additional maximum loss of from 15,000 to 30,000 jobs.

The industries most affected by defense cutbacks are as follows:

	Percent Share of Total Industry Employment Losses
Electrical Machinery	22.5%
Transportation Equipment	13.7
Ordnance	8.8
Machinery, non-Electrical	4.4
All other, including Service Industries	50.6
	100.0%

The geographic areas in which the impact from defense cutbacks are significant include the following.

	Percent of Mass. Prime Contract Awards in 1969
Boston SMSA	60.9%
Lowell SMSA	8.1
Lawrence-Haverhill SMSA	6.0
Pittsfield	5.0
All others	20.0
	100.0%

Within these areas, the impact on employment has been greatest in the Route 128 area and in Lowell, Lynn, and Quincy.

The skill breakdown of the job losses in defense-related industries and research and development firms is estimated as following:

Percent of Job Losses

Professional and technical	26%-33%
Skilled Production	49%-52%
Unskilled	18%-22%

As armed forces levels are cut, the number of veterans returning to the state and seeking jobs will rise. It is estimated that as many as 40,000 veterans have and will be seeking work in The Commonwealth.

Many federal government policies, including the phasing of defense cutbacks, the timing and effectiveness of counter-recessionary fiscal and monetary policies, and the willingness to support government non-defense markets, are crucial if the state economy is to move from wartime to peacetime conditions without significantly inducing an economic setback and if resources, previously expended on defense needs, are to be rechanneled to non-defense uses. The effectiveness of federal policies far outweighs the impact of policies that The Commonwealth can adopt to counterbalance the adverse economic consequences that arise from defense cutbacks. While this tends to imply the somewhat negative conclusion that The Commonwealth can do relatively little to ease the adjustment problems that arise from defense cutbacks, it does not mean that The Commonwealth has no avenues available to ease the adjustment process.

Short-run (1-2 years) action, while indeed limited, can be effective in expressing the state's concern and willingness to aid impacted businesses and people. Programs designed to be of use specifically over the short-run transitional period should be focussed on aiding the small to medium sized defense-supplier and individuals who have lost or will lose their markets and jobs. The public sector of Massachusetts cannot appreciably aid the large defense firms in their short-term adjustment to defense cutbacks. These companies closely coordinate their defense contracts activity with high-level federal officials. They constantly draw on the largest information regarding federal defense systems and plans, and have, in general, explicit corporate plans on diversification, conversion, new product development, and marketing strategies.

Over the longer time period (2-6 years) the public sector of Massachusetts has means to successfully offset many of the adverse economic impacts caused by defense cutbacks. Two general action avenues are open to The Commonwealth for effectively mobilizing unemployed defense resources.

The first is to actively promote and encourage business growth in all areas, but particularly in selected industries which have the potential for rapidly expanding and which may require the kinds of human and physical resources which are available in The Commonwealth and/or were previously used in defense industries.

The second avenue of promotion exists in facilitating the actual conversion of defense production and research development facilities and manpower to carefully chosen commercial activities as a means to insure continued economic growth and expansion. This is a relatively long-term endeavor.

However, the conversion of defense and space firms to civilian markets will be difficult because neither the products nor the markets are established. These firms have become accustomed to negotiating on specific type of contracts with an established customer, the Department of Defense or NASA. Planning and management has been geared to fulfilling the needs and specifications of these unique customers. As a result, these firms do not have the critical free market skills of sales promotion, advertising, and market research. The long lead time needed to develop new products and identify new markets will mean that the ultimate transition of these companies to a civilian economy will be slow and sometimes painful. During the period of transition, these firms will not contribute significantly to economic growth in Massachusetts and in fact, may serve temporarily to slow the process of growth.

However the technology problem is solved nationally, a different and more competitive business climate has emerged for Massachusetts companies. The technology leadership which gave this state special advantage in the 50's and 60's is no longer a Massachusetts monopoly.

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